

115 lines I hope that he finds here the expression of my gratitude for the enthusiasm with which he imparted to me the sum of his knowledge. In collaborating so completely, he showed much generosity since he was convinced that any bit of information about the past of Easter Island was worth a fortune.

I owe much to Victoria Rapahango, one of the last descendants of the king's family, who checked all my notes and helped me in the reconstruction of ancient techniques. She is perhaps the last person who perpetuates on Easter Island the traditions of nobility and culture of the old Polynesian aristocracy.

114 The archaeological investigation of the island was undertaken by Dr. Lavachery, who will publish separately the results of his survey of the north coast. Our joint work was carried on in a spirit of harmony that is one of my most pleasant memories of the Expedition. Dr. Drapkin, who was delegated by the Chilean Government to study the problem of leprosy on the island, willingly collaborated with us. He made most of the natural history collections for the Muséum d'histoire naturelle in Paris, studied the demography and the blood groups of the natives, and generously gave medical assistance to the natives.

123 Throughout my stay, from July 1934 to the beginning of January 1935, I tried to live with the natives as intimately as possible. I doubt that a longer visit would have added much to my material. However, I regret that I did not have sufficient time to study the acculturation problems, which I hope will be the aim of a future expedition. Likewise the time was too short to complete a detailed survey of the archaeology of the island. It would be desirable for a group of trained archaeologists to devote an entire year to making plans of the innumerable ruins scattered throughout the island. No new information could be expected from such a survey, but the ruins are unprotected and constantly threatened with destruction by the natives or careless visitors.

127 The published literature on Easter Island is considerable. Most of it has been listed in the excellent catalog of Father Martin Gusinde. I have consulted all the publications mentioned in it and others that have appeared since 1922. I am convinced that no important source has escaped my attention and that the reader will find in this book all the available documentation on the island.

114 A few days after we left Easter Island, it was visited by the Templeton Crocker Expedition. Dr. H. L. Shapiro, Anthropologist of the American Museum of Natural History and a member of that Expedition, studied the physical anthropology of the modern population, and has contributed to this book a chapter on the racial composition of the islanders.

126 All the legends and traditions that I collected were recorded in the Easter Island language. For reasons of economy, only a few examples of native text are published here. The original manuscripts are filed in the Library of Bishop Museum where they are available to students of Polynesian linguistics. These texts are accompanied by vocabularies and by additional chants.

Métraux—Ethnology of Easter Island

11

WATER SOURCES

There are no rivers on Easter Island. The little ravines (*ava*) which appear on the north coast are clearly not due to erosion, but may be partly of constructional origin. Water runs in them only rarely and sporadically. The rain filters into the porous ground forming local water tables where it meets impermeable layers. The chief water bodies are only slightly above sea level and thin streamlets often flow toward the shore. Unfortunately the fresh water, especially during high tide, mixes with salt water and becomes decidedly brackish. At several places walls were built to protect the fresh water from being spoiled by the sea. At Tahai there is a kind of basin, separated from the sea by a wall, where fresh water mixes with salt water. Previously the natives drank that water and today the cattle are watered there. Captain Cook obtained water for his ship from such a spring (53, vol. 1, p. 289):

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The little [water] we took on board could not be made use of; it being only salt water which had filtrated through a stony bench, into a stone well. This the natives had made for the purpose, a little to the southward of the sandy beach often mentioned; and the water ebbed and flowed into it with the tide.

Along the shore, where the coast is low, natives dug reservoirs (*puna*) which impounded rain water and perhaps some fresh water springs. A deep ditch, between 2 and 3 meters deep, is dug near the shore. The seaward, lateral sides are perpendicular and lined with stones perfectly fitted (pl. 1, C). The landward side slopes at an angle of 45 degrees to the base of the opposite wall and is paved with boulders. After a rain the running water is led to the interior of the basin where, at the same time, water from the underground water body collects. A few of these reservoirs or springs still contain water, but most of them are filled with mud. According to my informant, there is always water in them even though it does not rain. Cook's reconnoitering party report (53, vol. 1, pp. 283-284) that the natives used these reservoirs not only for drinking but also for bathing.

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Near Ovahe, at Vai-a-hoa, is a well which has been modified to form a modern water mill. The square pit is several meters deep; its smooth walls are lined with stones laid horizontally. In a few places there are springs, holes among the rocks into which water percolates. Ruins of ancient settlements are always thick around water holes. The most famous are the water pools near Ahu-tepeu, Puna-marengo, and Vai-tara-kai-ua. The water at Vai-tara-kai-ua is in a deep hole which has been covered with big blocks of stones so that only a small, narrow passage remains, just wide enough for one person. Behind Anakena abundant water is found. On the Puakatiki, a hole in a cliff where water collects has been carved all around into the form of a big human face (*Vai-a-heva*). After a prolonged rain the water of Rano-aroi flows through a gap into another pool. This pool empties into a long, narrow fissure where water is

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Metraux—Ethnology of Easter Island

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Matamea (Mars), Tautoru (The Belt of Orion), and Pau, a star which appears in October or November. The appearance of these three stars in October foretold death and evil. Fishermen were in danger of being caught by fabulous sharks (*ninhi*). Everyone had to behave properly lest a member of his family should disappear. At the end of the month, the priests climbed a tower (*tupa*) near the ahu and from there they announced to the crowd that the position of the stars had changed and that henceforth they could do no harm. Matamea and Tautoru were "bad" stars but Pau was sometimes bad and sometimes good. Reitanga is the name for Sirius. Near ahu Hihina-tangi-kotea there are six boulders whose form and position are said to represent the Pleiades (Matariki) and to have been put there by Tuu-ko-ihu, the culture hero, to remind people that the Pleiades are sometimes dangerous and can bring death.

An obscure tradition connects Matamea (Mars) with the raising of certain crops. A tapu was observed as long as this star did not appear in the sky.

Routledge (194, p. 235) mentions an observatory on Poike:

On the extremity of the eastern headland there is an outcrop of boulders, one of which is incised with a spiral design; the place is known as "Ko Te Papa-ui-hetuu", or "The Rock-for-seeing-stars" and here the old men came to watch the constellations. About two hundred yards from these boulders there is another engraved stone on which ten cup-shaped depressions are visible; this represented, it is said, "a map of the stars."

The natives did not show me this place and never mentioned it in discussions. Artificial depressions in rows or files are very frequent near the ancient settlements. Various natives interpret them differently as drops of rain, enemies slain by a famous warrior, tattooing marks, and so on.

Routledge (194, p. 235) gives the legend of the children changed into stars as the only nature myth she obtained on Easter Island. It was introduced recently by Tahitians and does not refer, as she suggests, to Orion but to 3° Scorpio or Scorpii. The Tahitian origin of the myth is well remembered by the natives, who told it to me as follows:

A woman went to a place where there was a feast. She saw the feast and came back with her children. Her husband saw that she was not at home and stayed to watch when she would come back. When the wife came, he asked her, "Where are you coming from?" "I come from the feast with the children." "Who told you to go to the feast?" She answered: "I went there by myself."

The man beat the woman, he hurt her, and she fled with the children to the sky and remained fastened there. The man shouted, "E pipiri ma, come back." "No, we shall not return; we shall stay here forever."

Routledge (194, p. 235) gives a slightly different version in which the woman was carried off by a stranger. The husband slew her, and she fled to the sky and was changed into a star. The husband took their two boys and followed her to the sky, "... where the three form the belt of Orion."

This myth is very popular in Tahiti and from there has spread to the

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[172]

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619 After their wedding nights both suffered from cruel pains in the stomachs
 582 and would have died if they had not applied to Pakarati, the catechist, who
 626 saved their lives by prayer and other ritual performances. This belief is per-
 [792] haps the survival of an ancient tapu against marriages between female mem-
 bers of the *ariki* group and common members of other *mata*. However, Rout-
 ledge (194, p. 246) affirms that unions between *ariki-paka* and commoners
 were possible in the old days, for the daughter of the great king Nga-ara is
 said to have married a man of the Marama tribe. It is certain that the king
 had to marry in his own tribe, though not in his own lineage! Other men of
 the Miru could marry into any descent line.

619 Certain physical peculiarities were attributed to the members of the dif-
 826 ferent tribes. Thus the Tupa-hotu were said to have tender feet which easily
 became sore in war expeditions. The Miru were bow-legged (*ngapau*).

GEOGRAPHICAL DISTRIBUTION OF TRIBES

172 Ruins of houses and ahus scattered over Easter Island correspond to the
 311 distribution of the ancient population. All villages were concentrated along
 361 the coast and the mountains and plains of the interior were sparsely inhabited.
 619 On the slope of Rano-aroi, near Vai-tea, the remains of two or three ahus
 may still be seen. Another ahu is a little north of Mount Oroï. On the west
 of the island were some villages and ahus built at the base of the slopes of
 Rano-aroi and at some distance from the coast. The settlements belonged to
 the Miru and the Hamea. Some Marama were scattered farther toward the
 interior. All the ancient settlements east of Vai-tea had been founded by
 families from groups in the east. As testified by the scarcity and the relative
 unimportance of the ruins, the groups living in the interior were isolated and
 composed of only a few members.

619 The ten *mata* or tribes were divided into two main divisions correspond-
 616 ing roughly to the western and eastern parts of the island. The western and
 northwestern tribes were called Tuu (usually spelled Ko Tuu) or *mata nui*
 (greater groups), and the eastern tribes were the people of Hotu-iti or *mata*
iti (lesser groups). The reason for this dualism is not clear. There is no
 tradition or fact suggesting that the splitting of the *mata* into two main divi-
 sions had a social function and it is probable that it was a political institu-
 tion. It was manifest mainly in a perpetual antagonism between the groups,
 the memory of which has been preserved in legends (p. 74). It is important
 to stress the fact that the tribes of the eastern division are more frequently
 mentioned under the collective name of Hotu-iti than the tribes of the west
 are under the name Tuu. Thus it may be inferred that the eastern tribes
 were more unified than the western ones. The above data implies that Hotu-
 iti was a primary tribe which divided into smaller groups. Tuu seems to be
 a simple geographic designation. Near Hanga-roa on the west coast there is

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and finally to two unmixed sub-groups, the Koera and Hahai. I do not know what was the character of the mixing in these cases, but very possibly the bulk of it arose through intermarriages, in which case the fact of the mixings of sub-groups would not necessarily be antagonistic to suggestions that their grouping was in the main social and local coincidently.

VILLAGES

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Remains of villages or houses are scattered along almost the entire coast. Few evidences of former occupation are found in the interior; only on the slope of Rano-raraku are there ruins of some villages. It is difficult to determine whether all the points along the coast were ever simultaneously occupied. We may assume that stony, inhospitable areas which bear traces of ancient settlements were inhabited after more favorable regions were entirely settled. Some villages were situated at the head of bays or near small creeks where canoes could be landed and where men and women could fish on the coast. Other villages, such as Vai-mata, Puna-marengo, Ahu-te-peu, were perched high upon cliffs. Large settlements were never far from fresh water. Ahu-te-peu is only a mile from a pool and Vai-mata has brackish water. The ruins of Puna-marengo can be explained only by the fresh-water spring there. Vai-tara-kai-ua was an important settlement, because it had one of the best wells on the island.

Stone foundations which are still found on the sites of ancient villages must not be taken as a basis for evaluating the density of the ancient population. Many ancient huts did not have stone curbs; and not all of the preserved house foundations were contemporary. It seems best to resort to earlier accounts to estimate the extent of ancient aggregation.

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Roggeveen (186, p. 19), who landed on the north coast, saw only six or seven long huts at that place, and inferred "that all the Indians make use of their possessions in common, for the large size and small number of their dwellings give one to know that many live together and sleep in a single building." Gonzalez' men (90, p. 102) assumed that most inhabitants lived in caves.

G. Forster (83, vol. 1, p. 569), standing on a hill near Hangaroa, "did not see above ten or twelve huts, though the view commanded a great part of the island." J. R. Forster and Cook mention houses on the south coast, about 3 miles from Vinapu (53, vol. 1, p. 282). De Langle, officer of the La Pérouse expedition, who made an excursion toward the interior of the island, describes briefly a little village near Vaihu, where he saw one long house and the foundations of several huts. (130, vol. 1, pp. 79-80).

The large scale map of Hanga-roa Bay in La Pérouse's Atlas (130) shows the distribution of the population on the coast. Near the present pier were a hut and an ahu. About 200 yards away stood three more huts and two stone houses. On the border of the actual village, the map indicates huts and caves; and a big house with stone foundations occupied the present site of

226 of crabs: *pikea-uri*, *pikea-nahenahe*, *pikea-tutu-au*, *pikea-tura-moa*, *pikea-paki-maroo*, and *pikea-toetoe*.

Sea urchins (*hatuke*) are plentiful along the coast. Natives crush them between two stones and boil them. In olden days trepangs or *bêche-de-mer* (*pipiri*) were eaten after their skins had been rubbed off. A big *Coelenterata* (*otaki*) is said to have been eaten. I saw the natives eat another mollusk known as *takatore-pare*.

Islanders are still fond of small shellfish, *pipipipi-uriuri*, *pipi-vaka*, *pipi-ekaka*, *pipi-nehenehe*, *pipi-momoko*, *ningoningo*. Shells of sea snails are found in great quantities near ancient settlements and in caves.

HOUSES

342 Easter Islanders lived in thatched houses, in semi-underground houses, or
362 in caves. All their dwellings were uncomfortable; the low houses were overcrowded, the caves dark and wet. Such indifference to comfort is not astonishing when one remembers that the natives lived mostly out-of-doors and that the houses were shelters for the night or for rainy days only. Scarcity of wood is partly responsible for the crudeness of the huts, but nothing prevented the building of more stone houses of the Orongo type. Though today all the islanders have frame houses, they are small and crowded. A few modern houses are built of stone, but this type is becoming obsolete.

CAVES

COASTAL CAVES

133 The coasts of Easter Island, especially along the west and north, are per-
342 forated with caves (*ana*), which have been used by the islanders either as permanent dwellings or as shelters for the night during fishing expeditions. When they are overtaken by darkness far from their homes, the natives go to sleep in the nearest cave.

342 Thomson, Routledge, and I have excavated the ground of several coastal
172 caves and found hooks, bone needles, and wrought bone fragments, indicating that those caves were once occupied by day and that fishermen used them as workshops. Some caves, especially that of Ovahe, seem to have been arranged for longer occupancy. The entrances are protected by stone walls, and inside are stone platforms on which to sleep. Some of these platforms are covered with a layer of straw—testimony that the natives still sleep there. [352] The largest of these caves is *Anna-havea* on the south coast.

INLAND CAVES

[727] The name *hare-kionga* designates inland caves or subterranean lava tubes, where defeated people are said to have taken refuge during wars. That this was the essential purpose of these strange dwellings we do not know, but the

artificial widening of the entrance, lined with smooth slabs, indicates the former use of these natural galleries by men.

The first of these subterranean dwellings I visited lies behind ahu Ohau. The opening, just wide enough to let a man pass, is lined with stones. A passage leads to a room which is too low to stand in. The first room continues into a long tunnel, which I partially explored without finding anything of interest.

A cave of exactly the same type is found on the north coast at Vai-tara-kai-ua, where caves are numerous. The access is through a narrow pit faced with stone. At the end of the pit there is a large, damp chamber, from which opens a very long gallery. This I followed for some distance without reaching its end. A few yards from here is a big cave with a carved stone near the opening. The walls of the cave are covered with petroglyphs which have been copied by Lavachery.

There are two important *hare-kionga* near the ancient village of Paravovo, between Hanga-o-honu Bay and Tonga-riki. The entrance to one is through a shaft 2.5 meters deep, whose walls are formed of hewn stones, tightly fitted. This shaft leads to a room nearly 7 meters long, 5 meters wide, and about 1 meter high. The shaft to the other cave is a little deeper. It forms the entrance to a small, narrow, and low room. On one side, a little passage opens into a sort of hall, 12 meters long. One side of the entrance has been faced with stone.

The most remarkable of the subterranean houses is that of ahu Vai-mata. Its existence is revealed by a low mound paved with boulders. A shaft 2 meters deep and lined with stones joins a horizontal passage, also flagged with carefully dressed stone, which is so low that one must crawl through it. The chamber to which it leads is oval and about 2.5 meters high. One side is natural rock and the other is faced with carefully laid stones. A platform at the back probably served as a bed. In this cave, as in many others, we found skeletons. The top of the cave has been roofed over with slabs where otherwise it would be open to the sky.

Between Vai-mata and Anakena, I visited several semi-natural houses. The roof of one was an enormous rock which had fallen in such a way that between it and the ground was a space hardly sufficient to shelter a squatting man. Despite its size, this shelter had been transformed into a permanent dwelling, as testified by the stone walls which close it on every side.

Frequently statues, which have fallen down the slopes of an ahu, are used as roofs for shelters, with stones heaped up on the sides forming walls. At Vai-mata and at Ahu-te-pito-te-kura the earth beneath fallen statues has been excavated. At ahu Vinapu a similar dwelling is reached by two narrow passages leading into a long and waterproof room. Such dwellings are undoubtedly very old and may perhaps have been built before the arrival of Europeans.

At Hanga-roa Bay, behind what is now ahu Okahu and close to a watch-tower (*tupa*), Cook (83, vol. 1, p. 570) saw a subterranean room; but natives barred his entrance. Frenchmen of the La Pérouse expedition were allowed to visit this cave and Bernizet (130, vol. 2, p. 255) made a plan of it to which he adjoined a technical description:

This subterranean chamber was entered by a sloping passage lined with stones (2 feet 10 inches long, 2 feet broad, and 10 inches thick) which terminated at a staircase formed by hewn stones. The door leading to the inner chamber consisted of uprights, a cornice and a sill made of stones "very well squared and fitted together without cement." The inner room had an oval form comparable to that of the ordinary thatched huts. Its dimensions were as follows: length, 30 feet; width at the middle, 11 feet; height in the center, 5 feet 6 inches; width of the door, 2 feet; height of the door, 3 feet.

Bernizet (130, vol. 2, p. 255), the only ancient traveler who entered one of the underground dwellings, says that "in these subterraneous caverns the

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342 inhabitants store their provisions, utensils, wood, and in general all their possessions." The fear lest foreigners should rob them of their goods explains, no doubt, why the natives prohibited Captain Cook and his companions from entering the underground house described by Bernizet.

It seems unlikely that defeated people hid in caves whose entrances were visible and whose locations were known by everyone in near-by villages. Possibly the caves were occupied by the inhabitants of a village in time of war, either in an effort to escape being burned alive in their grass houses, or after their homes had been burned.

To judge by the readiness with which the inhabitants of Easter Island, and for that matter all Polynesians, accepted almost any kind of shelter, it seems fairly certain that the caves served as dwellings. The interior arrangement and the care taken in construction of passages further strengthens this opinion. On that point we have the formal testimony of Gonzalez (90, p. 102):

Most of the natives of the islands dwell in underground caves, or in the hollow of some rocks, the entrances to which are so narrow and inconvenient that I have seen some of them introduce themselves in the opposite manner to what is natural, beginning by projecting their feet first, their heads last . . .

. . . Others (whom I believe to be their ministers), occupy dwellings close to the statues; these are built of earth below, but with an entrance way or porch of very roughly hewn and clumsily set up stones, after the fashion of a wall, with a certain number of steps for passing from one platform or surface ground to another, at different levels.

THATCHED HOUSES

DWELLING HOUSES

The shape of the Easter Island house has been repeatedly compared to an overturned boat with upward pointing keel. It consisted of a roof resting directly on the ground and supported by a framework composed of the following elements: a ridgepole (*hahanga* or *hakarava*), ridgeposts (*pon* or *tuu*), rafters (*oka*), purlins (*kaukau*), and the central post (*tonga*). The curved rafters were either stuck into the ground or fixed in holes along rows of curbstones.

Stone Foundations

342 Stone foundations of some of the ancient huts may still be seen behind
172 Ahu-te-peu, at Puna-marengo, near Hangoteo, at Anakena, Hanga-o-honu, on the outer slopes of the Rano-raraku, and on several spots along the south coast. They are formed by wrought basalt curbs (*paenga*, pl. 3, A).

These stone curbs were made of the porphyritic olivine basalt of Rano-a-roi. This rock was easily worked by primitive methods owing to its vesicular and coarse texture. The same rock was utilized for the cut and fitted blocks in the structure of the ahus (11, p. 1598).

The size of the stone curbs varies considerably; some are only 0.5 meter long, others are 2.5 meters or more; the average breadth is between 20 and 30 cm. As most of these

curbs are firmly embedded in the ground, it is difficult to estimate their total height; generally they rise 1 foot above the ground. Their depth underground must be between 30 cm. and 1 meter. The unseen part is generally roughly carved and thicker than the upper part, which has sharp angles and smooth surfaces. The upper face of each slab has 2 or 3 (rarely 4 or 5) cup-shaped depressions. These cavities, in which rafters were inserted, are 5 to 8 cm. deep with a diameter of 2.5 to 5 cm. The distance between them is variable.

The curbstones are embedded to form a complete oval (pl. 3, A). In a few houses the end curbs (*pini hare paenga*) are curved (fig. 15, b), so that the foundation may be continuous. However, most houses are sharply pointed at the ends with a small space left between the two end curbs.

The number of curbstones composing the foundation depends on the size of the house and the length of the curbs. The large hut seen by La Pérouse had, according to his plan, 70 curbs. Other houses of more modest size had from 15 to 18 curbs.

In the middle of the seaward side is an opening corresponding to a door.

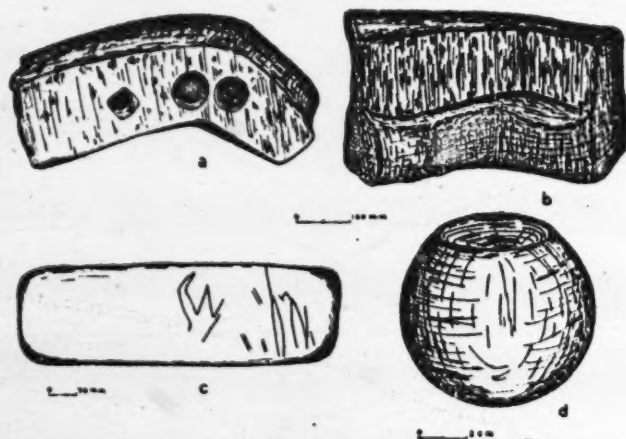


FIGURE 15.—Curbstones and household furniture. a-b, corner curbstone of the bird-man's house at Rano-raraku: a, top view showing holes for ends of rafters; b, side view; 580 mm. long, 290 mm. high, 190 mm. wide; c, ground rectangular stone pillow (*ngarua*), with incised figures representing a vulva and a bird without head (a line terminating in a fork incised on the other side), 250 mm. long, 860 mm. wide, 52 mm. thick (B3596); d, calabash (*ipu*) for drinking water, 72 mm. high, 85 mm. wide (B3567).

Few stone foundations are seen today because houses with stone foundations were not the most common type. They were the expression of wealth. It was easier and cheaper to stick rafters into the ground, though there was always the danger that rain, running down the slopes of the volcanoes, might penetrate into the house. Also, many foundations have been destroyed both before and after the occupation of the island by Europeans. In time of war a triumphant party would take as booty the curbs of the houses of the de-

342 feated people. Thus tradition states that a heavy stone, measuring 15 feet,
172 which is near an ahu on the south coast, had been brought all the way from
the north side of the island (194, p. 216).

342 Curbstones have frequently been included in the fabric of later buildings.
The front of Ahu-te-peu has many curbs embedded in its structure; some
have been used to prop up the enormous slabs on which the statues stood.
That fact, by the way, indicates very clearly that the carvers of the big statues
lived in houses identical to those of their descendants.

The masonry of some wells (those of La Pérouse especially) is composed
of curbstones torn from ancient houses. Of late, a great number of the slabs
has been used in the construction of sheep corrals or for foundations for the
frame houses in which the natives now live.

Among the early visitors to the island, only Forster and La Pérouse
describe curbstones. G. Forster's evidence (83, vol. 1, p. 570) is accurate,
except in the length (1 foot) assigned to slabs. Apparently by the middle of
the nineteenth century the custom of resting ridge posts on stones had fallen
into oblivion. Not one of the travelers or missionaries who described the
island at that time alludes to it. Nevertheless Routledge (194, p. 216) knew
old men "who were born and brought up in these houses."

Framework

According to tradition, the frame of the house was made of *toro-miro*
wood, but *hau* (*Triumfetta semitriloba*), *marikuru* (*Sapindus saponaria*), or
niakoi (*Thespesia populnea*) woods were also used. In small huts, the purlins
were frequently ti stalks. Scarcity of wood on the island did not allow the
natives to specialize in any one kind of material. However we must not exaggerate
the flimsiness of these structures. The Spaniards under Gonzalez (90,
p. 123) visited a house whose doorway was framed "on some six poles of 4
varas [yards] long and a span in thickness." The structure of the ancient
houses is known through the short but precise description by Bernizet (130,
vol. 2, p. 256), engineer of the La Pérouse expedition. He had an opportunity
to study a long house, probably an assembly house, which was in process of
construction near the present village of Hanga-roa:

The rafters were slender poles fixed at their lower ends in the holes of the stone
curbs. They were bent over and crossed at their upper ends with the opposite rafters,
being lashed to the ridgepole structure. This disposition, well remembered by the natives,
accounts for the narrowness of the houses. The middlemost rafters were the highest and
sometimes reached 10 feet, though 6 feet was the average height. The other rafters
gradually diminished in length, those at the ends of the house being hardly 2 feet high.
Thus the roof of the house formed a long arch. This semi-elliptical shape was not
invariable, for some huts made "towards the middle, either in the ground plan or the
elevation, a sharper curvature than that of the ellipsis." The stakes which formed the
ridgepole were supported by ridgeposts fixed in the ground at intervals of 10 feet. The
need for ridgeposts is explainable only if we remember that, owing to the scarcity of
wood, the rafters must have been of poor quality.

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STONE HOUSES

CHICKEN HOUSES

Ancient Easter Island hen houses (*hare moa*) were rectangular heaps of stones with a long, narrow, chamber reached by two long, narrow passages. Anyone intending to steal had to remove the stones and consequently make a noise which would attract the owners. Near the ancient village of Val-tara-kai-ua is a hen house still in good condition.

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The lower part is made of basalt blocks heaped and adjusted with great care. The size of the stones decreases toward the top, and the upper part is composed of small stones, piled at random. The whole building is rectangular with both ends slightly curved. Two small passages lead to the central chamber. One of the entrances is surmounted by an arched stone. Under the opening two superimposed stones make a kind of staircase. The structure is 7.3 meters long, 3.3 meters wide, and 1.8 meters high.

STONE HOUSES AT ORONGO

A detailed survey of the village of Orongo was made by the Routledge expedition (195). It is briefly summarized here. The houses composing the village of Orongo stretch in two rows along the narrow ridge between the crater and the sea cliff on the southern rim of Rano-ka-o. At one point, the two rows overlap one another.

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The houses are made of slabs which come from a natural quarry below the village on the crater side (pl. 3, B). The rock "is a fine grained volcanic sandstone bedded in large laminae." Despite numerous variations, these houses are all built according to the same general pattern. They have an oval or elliptical ground plan and their structure, like that of the thatched houses, suggests the form of an upturned canoe. The back walls rest against rocks or the slope of the volcano rim. In some places the ground has been excavated to obtain a level space. The foundations are made of rough cubes of stone, laid in the form of an oval. The inner side of the foundation course is lined with large vertical slabs which are set on edge and diminish in height from the center to the ends. The walls which have an average thickness of 1.5 to 1.8 meters, are remarkably solid. They are made of small or shattered fragments, "laid in horizontal course with broken joints." The spaces between the courses are filled flush with small stones. The back wall is lined on the outside with rough, wedge-shaped slabs, held in place by earth filled against them. The front wall has no external vertical slabs. The masonry has niches and shelves. There is sometimes a hatch between two adjoining houses and certain of them have inner annexes. The slabs or laminae set above the walls are "imbricated or 'tumble-home' till the opening is reduced to such a size that it can be spanned by a series of single slabs, thus completing the arch or roof. For these roofing slabs the curved laminae are chosen, and they are often of such dimensions that ten men would be required to move a single slab into place."

342

Like the thatched huts, these stone houses have the door in the middle of one side. This doorway is a sort of tunnel, lined on all sides by slabs, with two uprights and a lintel at the entrance. Some houses have a sill, formed by a slab sunk vertically into the ground, so that its upper edge is flush with the surface of the door. Some houses have two apertures, and in a few the aperture is double, the two passages being side by side.

When finished, these houses are covered with a thick layer of soil (at places 70 cm. deep). The slabs opposite the door are painted with representations of birds, European boats, dancing paddles, or the figure of the god with big eyes. Lintels or slabs in the houses are frequently covered with engraved vulvas. Outside a house there may be pits lined with stones, which serve as ovens or storage places.

The size of these houses varies greatly. The largest measures about 10 meters by

301 The wooden crescents or *rei-miro* are without any parallel in Polynesia.
 171 Large breast ornaments of quite different material and shape were worn in Tahiti and in the Marquesas (142, pl. 78). Perhaps the *rei-miro* are genetically related to the pearl-shell breast pendants widely spread in Polynesia. The superficial resemblance to the big, crescentic shells of the Solomon Islanders does not imply a connection between Easter Island and Melanesia.

The wooden balls (*tahonga*) are paraphernalia peculiar to Easter Island. The value given to wood on this barren island has favored the invention and development of a great many wooden ornaments unknown in other regions of Polynesia.

BODY PAINTING

302 Until very recent times men and women smeared their faces and bodies
 386 with red, yellow, white, and dark dyes. The red dye (*kies*) is a red-brown,
 412 weathered and mineralized tuff which is found in several places on the island,
 172 especially on the western slope of Poike Peninsula. *Kies* was pulverized in a small stone mortar. Whole specimens or fragments of these mortars have been picked up in ancient settlements, with traces of red ochre in the hollow.

412 The bowl is made of an oval, waterworn stone which has been slightly abraded, but the general form is more or less conical. The cavity is shallow in proportion to the volume of the bowl. In the large bowls the hollow has been carefully ground while the outside is either slightly ground, pecked, or rough. The rim has also been carefully ground and made even. To judge from the fragments, some of these mortars were of beautiful workmanship; the interior is not only smooth and regular, but the bowls are almost perfect hemispheres. In the Bishop Museum collection, besides one whole stone bowl, there are fragments of nine others, of which one is almost entire (B3501, 5960). The largest fragment in the collection is 165 mm. long and the smallest 88 mm.

386 Another earth, probably unoxidized tuff, gives a chalk-white color (*mari-kurn*). To extract this earth the natives dug holes or pits. One of these mines was seen by the Spaniards under Gonzalez (90, p. 122) near Vinapu where there was a cave "with furrows in it of various tints, from which the natives gave us to understand by signs they obtained the pigments with which they paint themselves." Geiseler (87, p. 15) mentions a deep hole on the west slope of Rano-kao, out of which the natives dug a yellow pigment. Charred ti leaves mixed with sugar-cane juice produced a beautiful black dye (*ngarahu*). Yellow or orange dye was obtained from turmeric.

173 Though *pua* is the Easter Island name for *Curcuma longa*, the general Polynesian term *renga* has been preserved in the name of the two birds *Mamu-keukeu-renga* who taught the natives how to prepare dye from turmeric root. *Renga* means also "something nice." According to the legend of the origin of the *renga* it was prepared in a special long house and the smell of the turmeric is still celebrated in legends (p. 369). Turmeric was uprooted (*kevi*) with a pointed stick, then carefully washed (*tata maitaki*) and grated (*oro*) on a rasp (*tama*) made of fine *toro-miro* or *hau* sticks. The natives compared this rasp to a grill or a mat. The grated turmeric fell into a stone basin (*taheta*).

Métraux—Ethnology of Easter Island

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Easter Islanders who wanted to increase their poultry so that they might celebrate a feast (*horo*) had the *ariki-paka* make a charm which contributed to the rapid increase of chickens. When invited to eat chicken meat, the priests received the rump (*huahua*) of the bird.

BIRD CULT

Until the second half of the nineteenth century the annual feast of the bird man (*tangata-manu*), held at Orongo, was extremely important to Easter Islanders. The rites performed were not only connected with the cult of the greatest god of the island, Makemake, but were endowed with special social significance, since ideas of prestige and economic privileges were closely associated with these ceremonies. The ostensible purpose of the ceremony was to obtain the first egg of the *manu-tara* (*Sterna hirundo*, sooty tern), the quest for which was entrusted to servants (*hopu*). The chief whose servant discovered the first egg received the envied title of bird-man (*tangata-manu*). This title, surrounded with tapus, brought to its holder and to members of his lineage certain material advantages and vast moral and religious benefits.

The far-reaching significance of the bird cult is illustrated by the extensive remains at Orongo, one of the most interesting archaeological sites on the island, and by the frequent use of bird and bird-man motifs in all forms of Easter Island art—tablets, wooden images, petroglyphs. The importance of birds in Easter Island culture and the use of birds as the basis for a religious cult are undoubtedly due to the poverty of the island fauna in which birds were the only conspicuous creatures. Not only were they the most interesting living thing next to man, but they contributed thousands of eggs for food.

The bird cult did not die out until about 50 years ago, long after the introduction of Christianity. Almost all recent visitors to Easter Island have studied the bird-man cult. Consequently there is a mass of contradictory material. Routledge, realizing the essential part this cult must have played in the ancient religious and social life, devoted much attention to it, and interviewed the last man who had participated in the ceremonies at Orongo. My information was gained mostly from Tepano, who was well acquainted with some details because his uncle was one of the last bird-men. The information he gave substantiates that gathered by Routledge and adds a few more details.

ORONGO

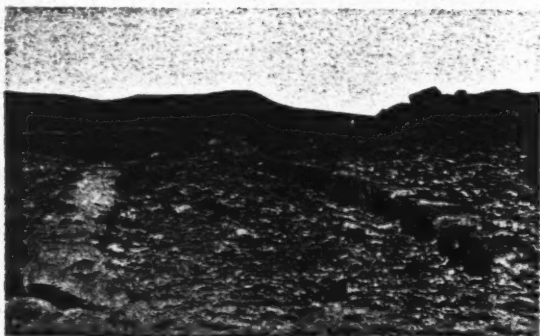
The ceremonies and feasts connected with the bird cult were performed at Orongo, on the slopes of Rano-kao at the southwest point of the island. The village of Orongo lies on the narrow ridge separating the sea from the crater lake. It was temporarily occupied at the time of the yearly feast and deserted the rest of the year.

1: Metraux E-5 (1934-1935) 1940

OY2 Easter Islanders OY2

BERNICE P. BISHOP MUSEUM

BULLETIN 160, PLATE 3



A



B



C

A, STONE FOUNDATION OF A HOUSE; B, STONE HOUSE AT ORONGO; C, TAPU
PILLAR (PIPI-HEREKO) NEAR AHU TONGA-RIKI ON THE SOUTH COAST.

[End Plate III]

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[784]

1: Metraux E-5 (1934-1935) 1940

OY2 Easter Islanders OY2

BERNICE P. BISHOP MUSEUM

BULLETIN 160, PLATE 4

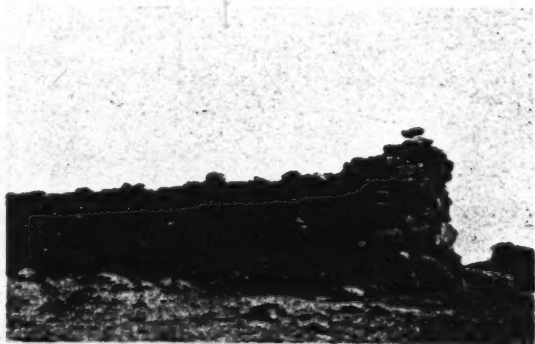
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A



B



C

A, FACADE OF AHU HANGA-O-HONU MADE OF FITTED, SQUARE SLABS OF BASALT; B, AHU TAVARI, SEMI-PYRAMIDAL TYPE (AHU PAEPAE); C, AHU PORPOE NEAR AHU MAHATUA ON THE NORTH COAST.

[End Plate N]

1: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

BERRICK P. BISHOP MUSEUM

BULLETIN 160, PLATE 5



A



B



C

A, AHU-TE-AVA NEAR ANAKENA, WEDGE-SHAPED AHU; B, RECTANGULAR AHU NEAR ANAKENA; C, UNFINISHED STATUE AT RANO-RARAKU, ATTACHED TO ROCK BY FLANGE

[End Plate V]

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442 ANNUAL REPORT SMITHSONIAN INSTITUTION, 1944

133 a paved highway is seen on close examination to be only a bed of
174 lava that in its flow reached the sea.

Other writers, abandoning the hypothesis of the sunken continent, have advanced the view that Easter Island is the center of an archipelago which vanished beneath the waves in a great cataclysm not so many centuries ago. They suggest further that the inhabitants of this supposed string of islands had used Easter Island as a burial place for their dead. According to this surmise, the dream Land of Davis would have been among the many islands that were submerged. But no geological facts can be found to support this theory either. We know, too, that the sanctuaries of Easter Island continued to be used as burial places by the islanders as recently as 70 years ago. Ruins of old villages near the monuments are added evidence that this speck of land was inhabited by the living in former times as it is today, and that it could not have been merely a mausoleum.

172 However, there remains the baffling fact that such a diminutive island is covered with great statues, some of them 30 or 40 feet high and weighing many tons. Despite my skepticism about the elaborate theories offered in explanation of this miraculous flowering of sculpture, I must confess that I, too, like all previous travelers to the island, was overwhelmed by a feeling of astonishment and awe when I first saw them.

172 There are few spectacles in the world more impressive than the
316 sight of the statue quarry on the slopes of Ranoraraku. The place is indeed sinister. Imagine a half-crumbled volcano, a black shore line, and huge cliffs which rise up from the sea with smooth green pastures above them. Guarding the quarry, near the volcano, is an army of giant stone figures scattered in the most picturesque disorder. Most of them still stand out boldly. Successive landslides have partially covered others, so that only their heads emerge from the ground, like those of a cursed race buried alive in quicksand. Behind the rows of the erect statues, along the slopes of the volcano, there are 150 figures still in the process of being born. Wherever one looks in the quarry, one sees half-finished sculpture. Ledges of the mountain have been given human shape. Caves have been opened in which statues rest like those on medieval sepulchers in the crypt of some great cathedral. Hardly a single surface has been left uncarved by the artists in their frenzy to exploit the soft tufa of the mountain.

There is something weird in the sight of this deserted workshop with the dead giants all about. At every step, one stumbles over discarded stone hammers. It is as if the quarry had been abandoned on the eve of some holiday, and the workers were expecting on the day after to return and resume their tasks; indeed, in several cases, only a few more blows would have been needed to cut the statues finally free from the rock of the slope.

In my opinion, the seemingly sudden interruption of work in the quarry is the most puzzling problem presented by Easter Island. Such an abrupt stoppage in the sculptors' activity suggests some unforeseen catastrophe, some extraordinary event which upset the entire life of the place. The natives have always had the idea that magic was at the bottom of the trouble whatever it was. There is a legend among them that an old sorceress, forgotten perhaps at a feast, may in her rage have put a curse on the quarry which frightened the workers forever away. 172 173

If we reject this fabulous story, we have no explanation of the phenomenon for which there is any basis however slight. Was there possibly some surprise attack by a hostile group on the island in which all the skilled stone carvers were killed? Was there an attack from chance invaders? Were the natives suddenly overwhelmed by a violent epidemic, or did something about their first contact with white men cause them to lay down their tools once for all? We do not know the answer, and I doubt if we shall ever have any light on it. 080

Whatever the truth about the end of their work, it appears that the last of the stone carvers were under the spell of a megalomaniac dream. Some of the unfinished statues are of enormous size, one of them 60 feet tall. Others are to be found in places out of which it seems impossible that they could ever have been taken. Perhaps their sculptors never intended to move these isolated giants. 172 532

There are two types of Easter Island statues—those which still stand in the crater or at the foot of the volcano Ranoraraku, and those which once surmounted the *a'u* or burial places. Though they are of the same stone and of the same general style, there are differences which are worth stressing.

A word must be said about the burial places, which were situated at frequent intervals all along the shore in a line that encircled the island. Most of them were huge stone structures of a peculiar plan developed from the primitive cairn. In these large mausoleums, the crude heap of stones has evolved into a real monument through the use of a retaining wall. This wall, which formed a façade always facing seaward, was built of slabs or regular blocks of stone carefully fitted together into beautiful, smooth surfaces. Behind this is a level platform, and then a gradual slope backward, filled in with coarse rubble. The central portion of the façade juts out, like the apron of a stage, and on the top of this projecting part of the platform stood a row of statues with their faces turned inland. In the long slope leading up to this sacred place the dead were buried. 172 764

The figures of the mausoleums or sanctuaries were in the nature of huge busts, the head being disproportionately large in relation to what appears of the body. The back of the head goes straight up from the shoulders and, with the vertical lines of the ears, gives the head a 172 764 532

172 flattened appearance. The eyebrows are well marked and overlap the
 532 elliptical cavities which represent the sockets of the eyes. The nose is
 744 long, the tip slightly upturned and the nostrils expanded. The thin
 lips are pursed with what seems a scornful expression. The arms,
 slightly flexed, cling to the bust with the hands joined over the ab-
 domen, below which the figure is cut off.

172 The other sculptures on the island—the lonely images on the plain
 532 and those that guard the slope of the volcano Ranoraraku—have the
 same features except that there are no sockets for the eyes. This part
 of the face, as in some modernistic sculpture, is defined only by the
 ridge of the eyebrows and by the flat plane of the cheeks below. The
 lower part of these statues tapers to an enormous peg, which was
 sunk into the soil.

171 The function of the *ahu* images can be surmised from analogies with
 532 the rest of Polynesia. The old Marquesans, close relatives and perhaps
 718 forebears of the Easter Islanders, adorned their stone platforms with
 statues which represented their ancestors. Among all the natives of
 central and marginal Polynesia, there is the same tendency to give
 human form to ancestral gods presiding over the sacred places. In
 the sanctuaries of central Polynesia stood huge slabs that were erected
 in the same position as the Easter Island statues. These slabs were
 receptacles for the souls of the ancestral gods, who entered them when
 they were called by the priests. The Easter Island statues are merely
 a more realistic development of this idea, favored by the existence of
 easily carved tufa deposits. Their sculptors elaborated rather than
 originated a tradition.

172 Everywhere on the island statues are to be found: on top of volcanic
 532 hills, along cliffs, and in places which seem almost inaccessible. Their
 mass must have made their transportation difficult. As a matter of
 fact, no one has yet explained how some of them were hauled from the
 quarry and then erected on the platforms on the opposite side of the
 island.

483 Of course, there are many other instances of people with rudimentary
 equipment moving objects of great size—for instance, the dolmens and
 menhirs of Europe. As the statues that the Easter Islanders
 [532] erected on their sanctuaries were of the native tufa, they were not ex-
 ceedingly heavy for their bulk. Their weight ranges from 5 to 8 tons;
 only one weighs as much as 20 tons. But because the rock from which
 they were carved is soft, it must have been necessary to take innumera-
 ble precautions not to mar or break them in transit. This would
 have been easy if abundant supplies of wood had been accessible,
 but, except for a few bushes, the island seems always to have
 lacked wood. Good material for making ropes was apparently also
 lacking. The only thing they could have been made from is paper

EASTER ISLAND—MÉTRAUX

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who formed a society, which existed not only on Easter Island but also on other Polynesian islands. In childhood they were taught in special schools to memorize and to recite the lore of their tribe.

Everywhere in Polynesia the chanters use such an "orator staff." Sometimes, as in New Zealand, the staffs are provided with notches, which are supposed to help in reciting genealogical tables. In the Marquesas, the chanters held, while chanting, a bundle made of string wound about with knotted ends hanging down, which was thought of as containing the substance of the chant though the connection between the words and the contents of the bundle was loose. The bundles symbolized the chants and were in consequence of paramount importance. They were solemnly given to the young people after they had been initiated into the lore of their ancestors.

These facts, I concluded, give us the best clue in the problem of the Easter Island tablets. To its chanters as to the chanters of other islands, the "orator staffs" were the accessories and the symbols of their function. Originally, the designs on the staffs or tablets might have been mnemonic, but later on they lost their exact significance in the minds of the natives and were looked upon merely as simple ornaments or magic symbols. It may be added that even now we can observe on Easter Island a slight relation that has been preserved between design and chant. The natives are in the habit of chanting when they make string figures or cat's cradles. This interpretation of the tablets may not contain the whole truth about them. I offer it rather as the hypothesis which best fits the facts available today, and which harmonizes also with what we know of an underlying tendency in Polynesian civilization.

But these are not all the questions that have been raised by Easter Island. Some observers have found in the well-carved and well-fitted stones of its sanctuaries likenesses and relations to the ancient remains in Peru, and to account for them have said that there must have been intercourse between these two parts of the world at some period of history. But close study has revealed that between the Peruvian and the island ruins the resemblances do not go beyond the general fact of an exact fitting of the stones. The plan and the structure of the Peruvian buildings are entirely different. In Peru the walls are all of carved stone blocks, whereas in Easter Island they consist of slabs set on edge outside with rubble behind. The only conspicuous architectural achievement of the Easter Islanders was to select the slabs and to dress their corners so that no gap would appear on the surface and impair the general appearance. This they could naturally have learned to do without crossing the Pacific in frail canoes and making the long journey inland to the site of the wonderful ruins in Peru. Moreover, these are certainly far older than the Easter Island sanctuaries. Thus it seems clear that we must

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- 172 give up hope that the remains on Easter Island will help to solve
174 the problems of early American civilizations.

174 The result of 3 years' work on the island culture pursued at the
173 Bishop Museum in Honolulu, with which I have been associated,
shows that this Ultima Thule was discovered and settled by Polynesians, who arrived in a fleet of double canoes sometime, roughly, between the middle of the twelfth century A. D. and the end of the thirteenth. The time of the discovery and settlement can be established approximately from the lists of chiefs that have come to us. These the early missionaries took down from the dictation of the natives. I was permitted to copy another one from a list which my native informant had compiled himself. Many errors have, of course, slipped into these records, but a comparative study of them shows that Easter Island has been ruled by about 25 or 30 chiefs since the founder of the dynasty, Hotu-matua, and his people first came to its shores. Allowing 25 years for each ruler's reign—the usual method of measuring time in Polynesian annals—we find that this must have happened very close to the twelfth or thirteenth century. From other sources, we know also that this was a period of great sea expeditions, and that the settling of New Zealand and of many other islands in the Pacific occurred in what seems to have been a heroic age of ancient Polynesia.

- 173 Curiously enough, the oral tradition of the migration to Easter Island has been preserved remarkably well even down to the present. While I was there, I was told in great detail many more or less legendary incidents of the voyage eastward of Hotu-matua and his associate, the noble Tuuko-ihu. These stories with their core of history were the glorious sagas of the first emigrants to this little lost world.

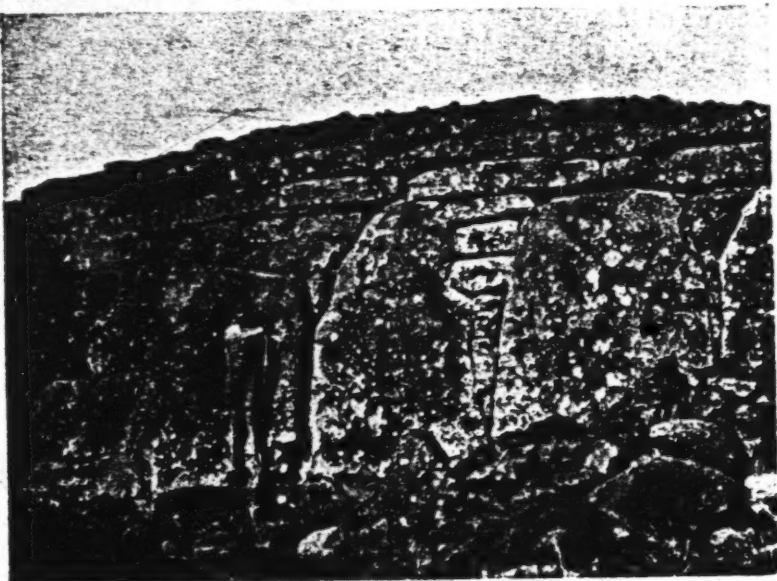
174 At about the same time, the Tahitians, Maori, and Marquesans had a culture which was still undefined but was very similar in the different groups. In the course of the succeeding centuries, over each of these island areas a civilization developed along original lines, though still retaining the common background. The Easter Island culture belongs to this purely Polynesian type. The ancestors of the present population merely improved upon the legacy they received.

Where then did the Easter Islanders come from? Since they are Polynesians in race, language, and culture, the problem of their origin coincides with that of the Polynesians as a whole and is as yet unsolved. That the Polynesians came from Asia is beyond doubt. India, Assam, and Indo-China have been variously given as the cradle of these seafaring tribes, but sufficient evidence to validate these theories is still lacking. Within the Polynesian world the Easter Islanders offer many analogies with the Maori of New Zealand, the people of Manga-
[171] reva and those of the Marquesas. Actually the resemblances between Easter Island culture and that of the Marquesas are very striking. It

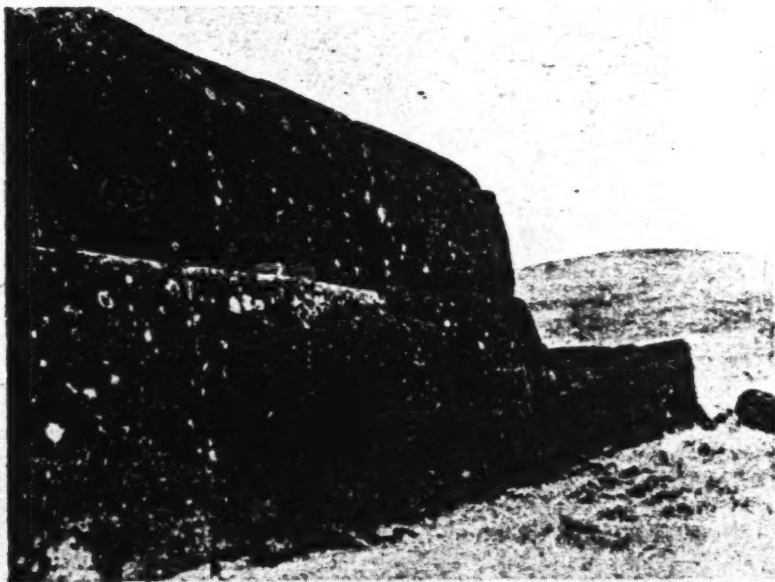
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Expedition Report, 1944.—Mitraux

PLATE 1



1. SEAWARD FACADE OF AHU (BURIAL PLATFORM) TE-PEU.
Notice in the structure pitted slabs taken from house foundations.



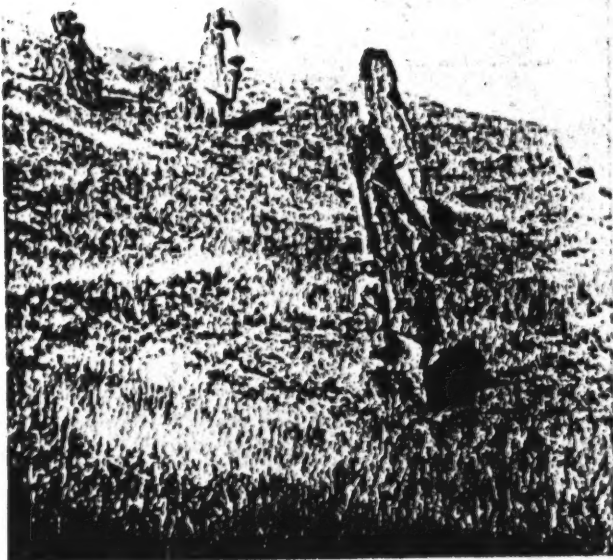
2. THE SEAWARD FACADE OF AHU VINAPU, THE BEST STONE STRUCTURE OF THE ISLAND.

[END PLATE 1]

Smithsonian Report, 1944.- Metraux

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PLATE 2

4: Metraux E-5 (1934-1935) 1945
OY2 Easter Island OY2



HALF-BURIED STATUES ALONG THE SLOPE OF VOLCANO RANO RARAKU.

(Eve Plate a)

4:Metraux E-5 (1934-1935) 1945

OY2 Easter Island OY2

Exhibition Report, 1944-Mitrovic

PLATE 3



1. GROUP OF PETROGLYPHS ON TOP OF VOLCANO RANO-KAO, AT THE PILGRIMAGE SITE OF ORONGO.

They represent the bird-man holding the sacred egg.



2. TEPANO, THE BEST INFORMANT OF THE ISLAND, CARVING A WOODEN IMAGE IN THE STYLE OF THE FAMOUS MOAI KAVAKAVA.

Modern specimens are crude as compared to the masterpieces of ancient art.

men into their cave, the officers into their tent. Previously to doing so, however, we took precaution to stuff our ears with paper, in order to exclude the "snapping beetle," one of the *Elateridae*, credited by the natives with a predilection for that organ, and myriads of which had been assailing us.

Our bed was composed of the moku—native grass—over which we placed our rubber sheets. At 2 o'clock in the morning we were awakened by a heavy rain storm, against which our flimsy patchwork tent proved but poor protection, the water either pouring through or running under our bed of litter.

On Wednesday, December 22, after a hearty breakfast, finding that we were none the worse for the previous night's experience, we struck camp, the pack animals were loaded, and at an early hour we were under way again. Our course this day continued along the coast line to the northward and around North Cape, skirting the base of Rana Hana Kana. The shore all along this part of the island is bold, rocky, precipitous, the black frowning basalt cliffs rising in many places to the height of hundreds of feet, truly an "iron-bound" coast, upon which the seas break with terrific fury, dashing the spray high in the air. The powerful solvent action of sea water upon even the hardest volcanic rock may here be seen exemplified in the fantastic shapes wrought by the waves on every side, the arches cut through, the innumerable caves excavated in the face of the cliffs, the pinnacles, towers, basins, etc., visible at every step. Many of the caverns were explored, and human and other bones found in some of them. The character of the surface land was about the same as on the preceding day, and the tramp over rocks and stones was a weary and trying one.

During the afternoon a detail of men was again sent ahead to locate the camp for the night, near a fresh-water spring known to the natives, and which the remainder of the party reached toward sunset. This, which we named "Camp Day" in honor of our commanding officer, was situated in the district of Vaimaitai (good water), near Motukan Point, about 3 miles distant from our camp of the night before, but fully three times as many by the route we had taken. One of the natives was sent back to the ship, with a note, for additional supply of stores. Two caves were occupied at this camp, one by the officers, the other being allotted to the men.

Despite the promising name of the district, the water again proved bad, being brackish. A couple of sheep had been captured and dressed, and from these and canned food, garnished with taro, sweet potatoes, and bananas, baked by the natives in their inimitable way, and washed down with copious drafts of tea, an excellent meal was made. Our cave proved a damp, ill-smelling place, and visions of pneumonia, rheumatism, and other resultant affections dominated our dreams, rendering sleep sickle and unrefreshing.

At 7:30 on the morning of Thursday, December 23, we were again

10: Cooke D-5 (1886) 1899

OY2 Easter Islanders OY2

TE PITO TE HENUA OR EASTER ISLAND.

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under way and continued our route along the cliffs on the north shore of the island. At platform No. 29 a pit was excavated in which a collection of human skulls, without any other portion of the remains, was found. Our track this day led us to Anakena Bay, according to tradition the original landing place of King Hotu-Metua, his queen, and followers, from whom the present inhabitants claim their descent. We found at the head of the bay a fine, extensive sand beach, the first we had fallen in with, forming a good landing place for small boats. The breakers and still water in the vicinity were seen swarming with fish of several varieties, of which the natives gave us their names. The sand beaches were thickly strewn with the "Portuguese man-of-war" (*Physalia utriculus*), called by the natives *Papaki*, and which, to the writer's great surprise, they informed him was eaten by them as food. Adherent to the rocks was found the singular, cuirass-covered little creature, called by the natives *hemoma*, one of the *Chitons*, perhaps the *maginfens*, which is also used by them as an article of diet. Thus, also, a small univalve, called by them *ngingongi*, large collections of the shells of which were found stowed away in the walls of the stone huts at the edge of the crater, on Itana Kao, where also was found the remains of the *Chiton*. The sea urchin, *Echinus (exculentus?)*, in Itapa Nui-hetuki, and a diminutive snail, which they call *pipi*, were found at Anakena. All the above form a part of their dietary, and they seemed to speak of and regard them as tidbits.

Sometime was passed at Anakena, exploring its vicinity where, there is every reason to suppose, an extensive town existed, for which the nature of the surface, ascending gradually from the water's edge to high land on either side, with a hill rising between and running back into the interior, forms a most admirable site. The remains of former habitations were found in various directions. At some distance back from the sea on rising ground, in an isolated position, far removed from any platform or image, was found the largest tuffa crown we had yet seen and which subsequent investigation proved the largest on the island. It was slightly oval in shape, lay on its side, was buried in the earth to a depth of about 2 feet, and by actual measurement was 27 feet 9 inches in circumference, 9 feet 9 inches in diameter across the long and 9 feet 2 inches across the short oval, and 9 feet high.

Beyond Anakena Bay the walking became especially difficult and laborious at one point, near Ovale Bay, it was necessary to scale the face of a cliff, at about midway of its height, on a narrow ledge of rock.

Our camp, named "Whitney," for the honorable Secretary of the Navy, was located for this night near Hanguone Bay, about 4 miles from our starting point of the morning, and it was nearly dark when we entered its welcome precincts. Supplies from the ship, brought by the boat, which had been nearly all day reaching Anakena, were carried thence overland and arrived in camp during the evening.

Near our present camping ground we found the best water of any

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during our entire trip and we duly commended our guides, accordingly, much to their gratification. I was much surprised when, next morning, on visiting the well, or spring, situated immediately adjoining one of the image platforms, I found it nothing more than a shallow excavation among the loose stones, and covered in order to keep the cattle and sheep from drinking the precious fluid, of which there was but a few inches in depth remaining. The water was surface water only, and had percolated between the rocks, into the cavity, after rains. The knowledge that these image platforms, have, from time immemorial even unto the present day, been utilized as burial places by the natives, did not enhance our enjoyment of the liquid.

123

The men slept in a comfortable cave that night, and for our own accommodation an overhanging shelf of rock was economized. This was too narrow to entirely shelter the party, and the deficiency of rock was, therefore, supplemented with blankets, banana leaves, etc., laid upon cords stretched in various directions. The scheme proved a delusion, for the post-midnight showers descended as usual, the banana leaves formed admirable conduits to lead the water where it did the most harm, and the customary hasty vacating of the den in the night was the inevitable result. These successive nocturnal experiences served to impress on our minds the absurdity of leaving the ship unprovided with a suitable tent, or at least an old sail with which necessary shelter could be improvised.

We struck camp and got away early, sending the camp builders with the pack animals overland to the south side of the island, where at a certain place, as the natives informed us, a fine, roomy cave and good water would be found, and which was decided upon as our next camp.

Our own course continued along the north coast around Cape Pokoria, along the east shore to Cape Amataavanui, and thence in a westerly direction along the south coast to camp, near Hangi Nui Bay and Point Onetou.

[172]

During the early part of the day the ground was of the same rugged nature as that already passed over, but on reaching the base of Mount Pua-ko-taki, at the eastern end of the island, the character of the surface changed, being covered with hummock grass, alternating with extensive tracts of fine, red volcanic sand, and dust, more particularly on the northern and eastern slopes of the mountain. It was asserted that in this red sand most of the stone axes and other implements were to be found, particularly after strong gales, when they were uncovered by the wind, and careful search was made accordingly, but with indifferent success. After luncheon, partaken of on top of the mountain, the descent, which was gradual, as was also the ascent, was made on the eastern side, the ground being of the same sandy nature. Diligent search was again made while traversing this, and a few specimens of stone implements, in large part mutilated, were obtained.

342 grass. There were several elevated platforms, edged off with bowlders, which were for sleeping places, and the remains of an ancient fireplace could be traced in one corner. Two huge rocks, with a flourishing tobacco plant growing between, guarded the entrance, from which a grass-covered lawn inclined downward to the rocks at the water side.

The men were accommodated in another comfortable cave at about 100 yards distance inland, and the camp fire was kept brightly burning in a clear space among the bowlders on the declivity hard by.

312 At no time during our trip were we without food. On the contrary, sheep were plentiful all over the island. Drinking water, so indispensable, and yet so scarce on Rapa Nui, was obtained from several sources near Camp Baird, but all was equally unpalatable. Our first supply (we remained at this camp about three days) was obtained from a so called well, half a mile distant, located among the rocks near the edge of the bay, and was salt at high water and more or less brackish at all times.

The water from a spring discovered by Quartermaster Lowrie was also unpalatable, and a supply obtained from the crater of Rana Koraka, near by, owing to its animal and vegetable impurities, was more so. It is to this crater that by far the larger number of cattle resort to drink, and their grazing ground, for this reason, is mostly located on this part of the island.

080 On the evening of our arrival, December 24, having partaken of a hearty dinner and lighted our cigars, we stretched ourselves, weary and foot sore, on the grass in front of our cave. The conversation, brisk and merry at first, soon flagged, became desultory, and presently ceased entirely. It was "the night before Christmas;" our mere physical, corporeal nature was pressing the soil of Rapa Nui, but the spirit, our immaterial part, was many leagues away.

172 At various times during our stay the writer purchased crania which the natives offered him for sale, and among these were several skulls of ancient Kings, bearing peculiar marks which, Mr. Salmon assured him, he then saw for the first time, and of the genuineness of which he had no doubt.

123 Christmas forenoon was passed in exploring the region in the vicinity of the camp, several cairns being opened with variable success in the matter of specimens. In the afternoon the crater of Rana Koraka was visited and note taken of the very numerous finished and unfinished images, some standing, others prostrate, scattered over its slope and the great plain at its base, where there is every reason to believe once stood a populous town. The quarries, "workshops," were also visited and the many partly completed monoliths, still attached to the original rock, examined. As in Egypt, where, in the quarries at Syene, near the First Cataract, the largest obelisk still lies unfinished, so here, in one of the excavations on the outer slope of the crater, may be seen the largest of the stone images to be found on Rapa Nui in an incomplete

calm, is 1,100 miles, and the South American coast is 2,100 miles to the eastward. [31]

The island is irregularly triangular in shape. Its greatest length from NE. to SW. is 13 miles; its greatest width from North Cape to Cape Hoe-Hoe, in a direction from NNW. to SSE., is 7 miles. The circumference, measuring from headland to headland, is about 34 miles, and the area of the island is 34 square miles.

The surface is diversified mountain and plain, the former usually rising abruptly from the latter, and generally at a distance from each other, so that, with one or two exceptions, it can hardly be said that there are valleys, strictly speaking. The mountains—a goodly number in proportion to the area of the island—are mostly cone shaped, and not of very great elevation, the tallest, near Cape North, being but 1,767 feet high. The most extensive plain is at the base of Rana Roraku, extending thence in a westerly direction for several miles, and it is believed that in ancient times a large town existed on this site, in whose vicinity all the monoliths were carved. [33]

The coast line on the southern and western sides, except at the extreme southwest end where Rana Kao looms up, is generally low, but extremely rocky. The northwestern, northern, northeastern, and eastern coasts are a succession of black, frowning, precipitous, basalt cliffs, worn into innumerable caves by the erosion of the sea, and with huge attached boulders scattered at the base, over and against which the waves dash with resistless fury, forming a veritable iron-bound coast. Many of the caves thus formed have been inhabited and have also been used as burial places; and the remains of human beings, with implements interred with them or secreted by the modern natives, sometimes reward the diligent searcher. [172]

There are but two or three points around the entire coast line at which a sandy beach may be met with. One of these, small in extent, is on the south side, near Mr. Salmon's residence at Vailu, in a picturesque little bay, used as a bathing ground and boat landing.

Another, and much the larger, forms the beach of Anakana Bay on the north side of the island, the legendary landing place of Hotu Matua, and by far the best and safest boat harbor around the coast.

The soil is for the most part decomposed or disintegrated lava, nowhere of any great depth, but exceedingly fertile and in places, as for example, where excavations were made inside of calms, it was found of the fineness, color and richness of garden mold. [174]

Except where a few clearings have been made, nearly the entire surface of the island is covered in astonishing profusion with fragments of lava, varying in size from that of a pebble to that of a huge boulder. They are nearly black in color, hard, sharp, angular, weather-worn; and it is these, in places covering the ground, which render pedestrianism so difficult and laborious.

Until supplied with wood from wrecked lumber vessels the modern [342]

262 Inferred from the statements contained in these pages, is never an elaborate one, it may readily be seen that they never suffer for lack of food of some sort, the principal items being sugar cane, taro, and sweet potatoes. Then, too, they are not heavy eaters, and gluttony with its attendant corpulency, so common in some of the other islands, is quite unknown here.

357 There are no fences or inclosures of any sort about their houses, which stand in the open field, with the grass growing to the doors, and nothing of an offensive nature was observable in the vicinity.

POPULATION, MANNERS, AND CUSTOMS.

174 It is difficult to obtain accurate information regarding the population of the island prior to the year 1800. That a numerous people must have existed here during the days of the image builders seems to be well attested by the works they have left behind them; the multitudes of colossal stone images and crowns; the numbers and vast size of the platforms on which these stood; the great paved areas beside them, which afforded room for large assemblages; the masses of foundation stones scattered over the island, many of which, still in position, show the strange shapes given to the houses which were erected upon them, and even admitting that these antiquities, and the work of fashioning them, covers a period of many years, the fact remains, nevertheless, that the immense labor involved, aided merely by the rude stone implements, which alone they were known to possess, must have necessitated the employment of a vast number of laborers. These, with their families, those engaged in the cultivation of the soil, in fishing and otherwise providing food, the aged and infirm, and those employed in other pursuits, must have made up an aggregate much larger than would at first sight appear.

With reference to the length of time covered by these works, it would seem, from the large number of images still to be seen on Rana Roraka, both inside the crater and on its outer slope—some finished, others only partly so, and others still in the quarries—that there was a large amount of work in process of execution at the same moment, and that, judging from the condition in which it was found, some sudden calamity must have overtaken the workmen, causing all labor to cease abruptly.

Indeed in respect to the astonishing number of volcanic stones so evenly scattered over the surface of the island, especially on the eastern half, it does not seem reasonable to suppose that they were there when the place was densely populated, of which latter circumstance there can scarcely be a doubt. This remark applies with especial force to the great plain at the foot and to the westward of Rana Roraka, where a large town is supposed to have existed, inhabited in part, it may be presumed, by the great numbers of workmen employed in the quarries of that mountain. Admitting this to be true and associating this with the fact that large numbers of the images seen in this vicinity are in

TE PITO TE HENUA OR EASTER ISLAND.

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an unflushed condition; that many more are to be found in the quarries, both inside the crater and on its outer slope, in all stages of development; and inferring from this that the workmen suddenly ceased their labors, the thought readily suggests itself, in explanation of the mystery, that either Rana Koraka or one of the neighboring volcanoes suddenly entered into a state of activity, threw out these showers of stones and, probably destroying many lives, stopped the labors of the workmen, which were thenceforth never resumed. Perhaps, too, the same calamity overthrew many of the idols, of which not one is now standing on its pedestal, laid waste the island, and wrought the destruction of the trees which once adorned it, and from the period of the occurrence of that disaster, the time of which can only be remotely guessed at, dates the decadence of the ancient people of Te Pito te Henua.

The soil of the island is very rich and productive, scant and unpromising as it may appear in many places, and with proper clearing and cultivation, and the planting of the appropriate varieties of food, such as could be stored for consumption during the dry season, supplemented by the sustenance to be derived from the supplies of fish taken, with which the waters abound, a very large population might, no doubt, be maintained.

As to the supply of water requisite for such a number of people, objection on that ground is not insuperable. Diligent search was made by the writer for the remains of cisterns, or any other evidences which they might have left of having had reservoirs for the storage of the precious fluid. None such were to be seen anywhere, and yet they might have possessed them, but of so perishable a character that all traces have long since been obliterated. It seems certain that they had no knowledge of any cement; it is not likely, therefore, that their reservoirs would have been built of stone. Then, too, there remains the fact of the immense bodies of water stored in these natural cisterns, the craters, particularly of Rana Kao. Here is a volume of water, at the present time at least 300 feet in depth, with a circumference at the surface of 2½ miles, and, if the parts of the crater visible above the water line be extended downward, probably conical in shape. A moment's consideration will show that here is a supply of water sufficient for an almost unlimited number of beings for an indefinite period. It may easily be imagined, also, that measures were most likely taken to maintain its purity, and that a people as intelligent as they appear to have been had some device for obviating the labor of transportation to the top of the crater.

From what has been said it would appear that, even at the present day, the physical characteristics and natural conditions governing the island are not incompatible with the existence and well-being of a large population. I was not surprised, therefore, when Mr. Salmon informed me that from 1850 to 1860 the number of inhabitants was

EASTER ISLAND—LAVACHERY

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stone, so easy to fashion is the stone of this island. This argument¹⁷⁴ can be used against those who put forward the alleged difficulty of⁴¹² carving igneous rock as a reason for attributing them to a race more skilled, more strong, and gifted with better implements than the Polynesians.

But to return to the first Polynesian colonists. Very probably the¹⁷⁴ fauna and flora of Easter Island were extremely restricted. But following a custom common in all their migrations, they would have taken with them plants, seeds of the most useful vegetables, rats, and chickens. They colonized the island, and their first settlements were at Anakena on the north coast and at Akahanga on the south. They set about conserving rainwater, for Easter Island has no springs. At the same time they learned how to protect the crops against the continual winds. They were familiar with certain crafts which they hold in common with all Polynesians—the making of cloth from mulberry bark (tapa) and the working of wood and stone. The latter craft differs only from that found in the other Polynesian islands in respect of the size of the monuments. The abundance of easily carved stone was the sole predetermining cause of the Pascuans erecting on their island the largest statues found in the islands of Oceania.

The technical skill of the former inhabitants is seen also in the¹⁷⁴ manufacture of implements and weapons of obsidian, and of fish-¹⁷² hooks of stone and bone. These last were made with human bone, for man was the only mammal available with bones large enough. The Pascuan writing on wood shows their skill and taste. There have been found a large number of rock paintings and engravings, the former magical, the latter merely trial pieces.

The Pascuan house, when it is above ground, shows many tech-¹⁷⁴ nical analogies with the Hawaiian house, which, like it, is roofed³⁴² with tufts of grass set on a framework of boughs. Whenever pos-¹⁷¹ sible, the Pascuans settled themselves in artificial caves or holes in the ground, which provided a less precarious shelter in war and against thieves. The fowl house was built on the same principles.

The Pascuans were tattooed, and on feast days they painted their¹⁷⁴ bodies with appropriate emblems.³⁰⁴

Ten family groups or clans divided up the island between them. The king belonged to the clan of Miru. His place of residence⁶⁴³ changed, and his role was indeterminate. Many taboos, notably in¹⁷⁴ the matter of food, isolated him from Pascuan life. He did not engage in the wars which often broke out between the clans of the west and north and those of the east (Kotuu against Hotu Iti). He pro-

* Unfortunately, however, the mystery mongers are not as a rule open to reason. Mystery is their religion.—Translator.

12: Routledge

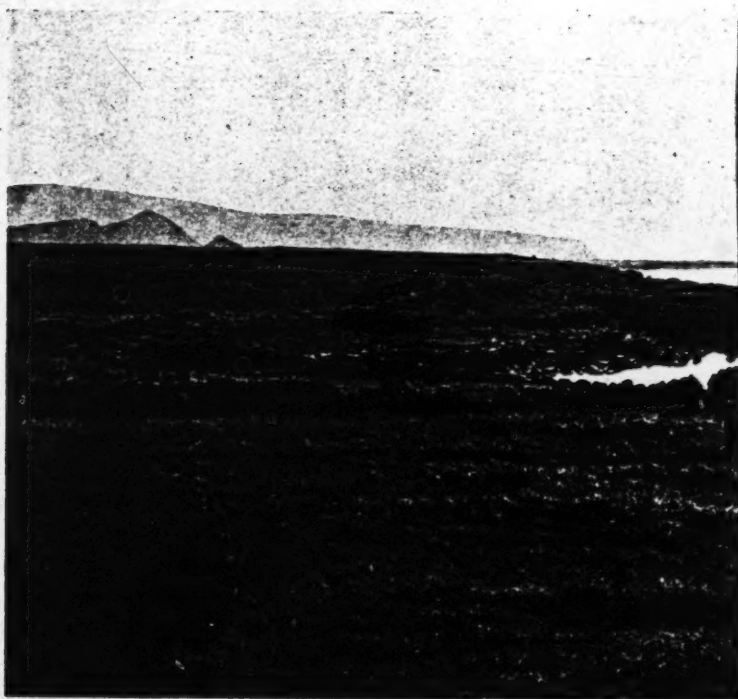
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OY2 Easter Islanders OY2

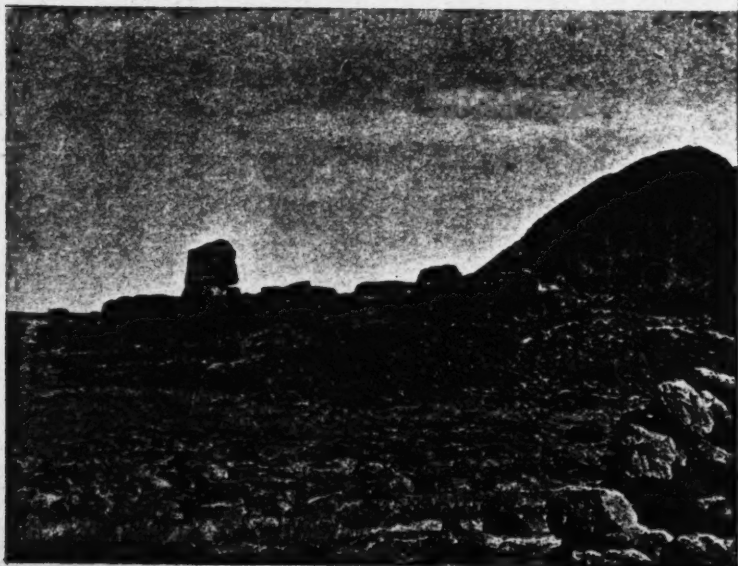
[For information on the archaeological remains of the village and carved rocks of Orongo see category 116, pp. 426-51.]

14: Routledge E-5 (1914-1915) 1917
OY2 Easter Islanders OY2

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● 192
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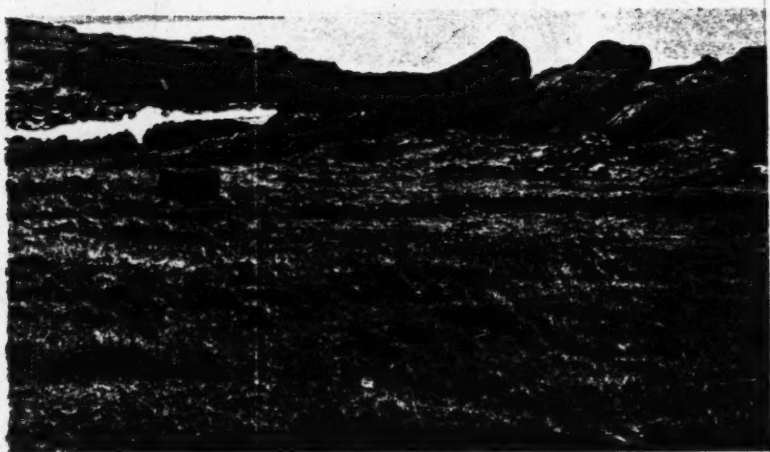
A TYPICAL



[Facing p. 324 a]

14: Routledge E-5 (1914-1915) 1917
OY2 Easter Islanders OY2

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A TYPICAL AHU FROM LANDWARD, WITH IMAGES ON THEIR FACES A

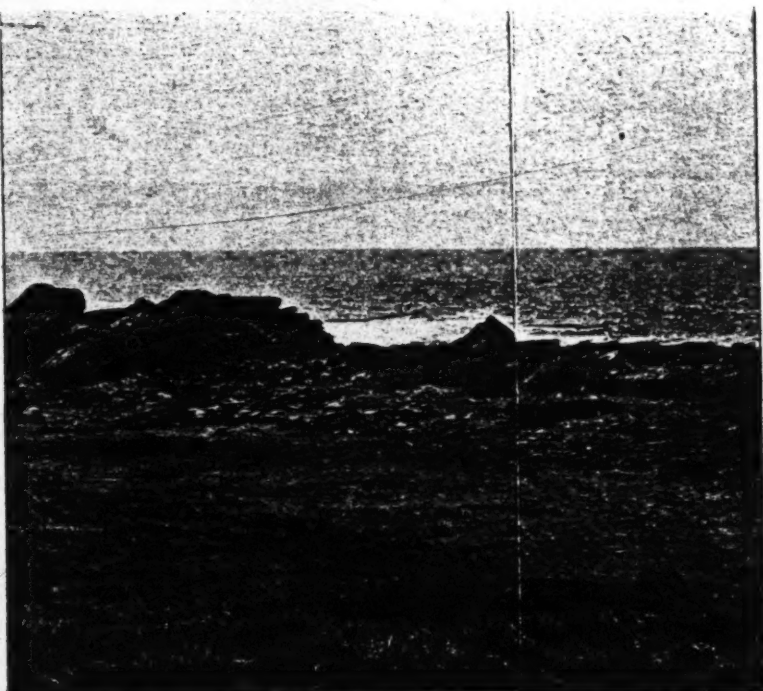


AHU OF TONGARIKI FROM SEAWARD WITH BASES OF FALLEN IMAGES. SOUTH

[facing p. 324b]

14: Routledge E-5 (1914-1915) 1917
OY2 Easter Islanders OY2

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ON THEIR FACES AND "HAT" IN FOREGROUND



LEN IMAGES. SOUTH-EAST FACE OF RANO RARAKU IN DISTANCE

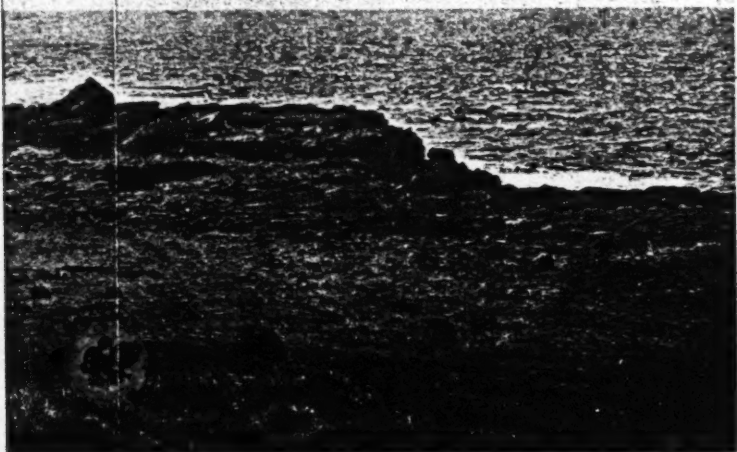
[facing p. 324c]

14: Routledge E-5 (1914-1915) 1917
OY2 Easter Islanders OY2

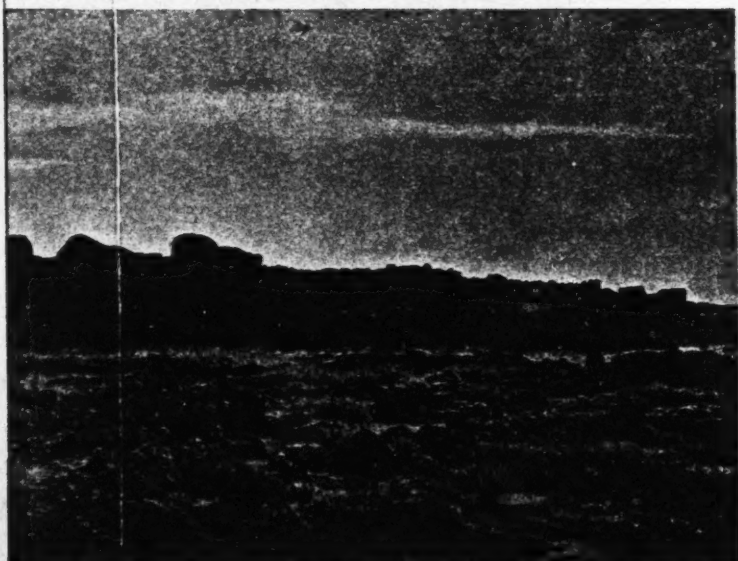
133

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ROUND



RARAKU IN DISTANCE

[facing p. 324d]

EASTER ISLAND

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the island. We received during these months another visit from the Germans. This time it was the cruiser *Prins Eitel Friedrich*, which for about a week used the island as a base to secure fresh meat and to coal from a captured French collier, which she subsequently sank off the island. On departing she left with us her prisoners of war, nearly fifty English and French sailors. When at length in the following March the *Mama* returned she was at once despatched with messages to the British representative at Santiago, informing him of the use to which the enemy were putting the neutral territory of Chile, and of a suspicious vessel seen in the neighbourhood of the island.

So much for our experiences on the island; let us now turn to the scientific work, and deal first with Archaeology.

Easter Island is a mass of stones; it is also a mass of ruins. Every one who has come to the island, from its earliest inhabitant to recent ranch managers, has for one reason or another made buildings or walls of these stones, while every succeeding generation has allowed those of its predecessor to fall to pieces, if indeed it has not wilfully destroyed them. Certain things can of course at once be recognized as megalithic remains; but in the majority of instances it requires an education of many months to know whether tumble-down stones are, for example, an old burial-place or a ranch wall which has been allowed to fall into disuse. Unfortunately in some instances the ancient and modern are inextricably mixed. All the way round the coast are the remains of what have been known as the stone Terraces or Platforms, the native name for which is *Ahu*. An early manager was seized with the idea that the sheep injured themselves by drinking salt water and that it was necessary to build a wall to keep them from it, although the sheep had in reality found the streams of fresh water which flow into the sea below high-water mark. It was obviously most convenient from the manager's point of view to run such a wall along a succession of terraces, using their stone for its construction. Thus a large number of these unique remains have been ruined. Some also are gradually falling into the sea from coast erosion. The terraces have been used for the disposal of the dead; a few lie inland, but the majority are near the coast, and extend all round it, numbering about two hundred, all of which have been measured and described. They are of four different types. Of three of these—interesting as they are—there is no time to speak. The fourth is the type of construction on which stood the great figures noted by the early navigators. These terraces, or *Ahu*, consisted of a long wall on the side facing the sea, averaging about 300 feet in length and 8 to 14 feet in height, flanked on the land side by a paved slope of masonry. Some walls are of comparatively rough construction; in others the stones are beautifully wrought and fitted, in some instances with great slabs as much as 7 or 8 feet in height. The wall consists of a central portion and of two wings, which are continuous with the centre but slightly set back from the sea. The

192 structure contains vaults in which the bones of the dead were buried, and
 964 its surface was used for the exposure of corpses, which were wrapped
 532 in matting and supported on sticks. On the top of the centre wall is a level platform on which stood the images, each supported on a stone slab or pedestal. They had their backs to the sea and looked inland over the corpses and bones of the dead. No complete statue is now standing on its bed-plate. Luckily however the lower portion of one still remains *in situ* on the terrace of Tongariki. The images have generally fallen forward, and, in the best preserved instances, lie in a row on their faces; but in a few cases one may be seen lying on its back toward the sea. Some have been considerably damaged in the fall, but not a few are intact. It has been suggested that the images were thrown down by an earthquake. This possibility was carefully borne in mind, but nothing was found to confirm such an idea. It seems, on the other hand, certain that they were deliberately overthrown by the victor in tribal wars, and that this was accomplished by removing stones underneath the pedestals on which they stood.

192 The images never varied in their general characteristics, and the best
 532 idea of them can be gained from the one brought to England in 1868 by H.M.S. *Typhoon*, which now stands in the porch of the British Museum. It is a half figure cut off at the termination of the trunk, and with the arms placed so that the hands nearly meet in front of the body. Careful study on the island made clear that it portrays not a standing figure but a sitting one. The length of the ears shows that the statues represent a people whose custom it was to extend the lobe; and this is one of the few clues to their history. A perfect idea of the hands can be obtained only by excavation of unweathered specimens.

Some of the images on the terraces have been more than 30 feet in height, but from about 12 feet to 18 or 20 feet are more usual measurements. The crowns on the heads of the statues were about 5 feet in height, and were made of a different stone—a red volcanic ash obtained from the centre of the island, where a small crater stands on the side of a larger volcano. A few unfinished hats still remain inside this crater, but a larger number are found on the side of the hill or on the low ground at its foot. They may have been in the course of removal to the terraces when the work was stopped. The crowns found here are nearly cylindrical in form; the work must therefore have been finished on the terraces, for the completed hat has a knob on the top and a hollow on the lower side where it fitted on the head of the image. This depression is not in the centre, but leaves a larger brim to project over the eyes, an arrangement noted by the earlier voyagers, who studied the question how the hat maintained its balance.

133 The statues were made in the quarry of Rano Raraku, an old volcano which stands alone at the eastern end of the island near the south coast. This is the most interesting place in the island. It was unfortunately never

15:Routledge E-5 (1914-1915) 1919
OY2 Easter Islanders OY2

FIG. 31.

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STATUE AT THE BRITISH MUSEUM.

For back of statue see fig. 106.

[Facing p. 165]

[pp. 1-164 not processed]

CHAPTER XIII

PREHISTORIC REMAINS

AHU OR BURIAL-PLACES

Form of the Easter Island Image—Position and Number of the Ahu—Design and Construction of the Image Ahu—Reconstruction and Transformation—The Semi-pyramid Ahu—The Overthrow of the Images and Destruction of the Ahu.

In many places it is possible in the light of great monuments, 172
to reconstruct the past. In Easter Island the past is the present, 814
it is impossible to escape from it; the inhabitants of to-day are less real than the men who have gone; the shadows of the departed builders still possess the land. Voluntarily or involuntarily the sojourner must hold commune with those old workers; for the whole air vibrates with a vast purpose and energy which has been and is no more. What was it? Why was it? The great works are now in ruins, of many comparatively little remains; but the impression infinitely exceeded anything which had been anticipated, and every day, as the power to see increased, brought with it a greater sense of wonder and marvel. "If we were to tell people at home these things," said our Seiling-master, after being shown the prostrate images on the great burial place of Tongariki, "they would not believe us."

The present natives take little interest in the remains. The statues are to them facts of every-day life in much the same way as stones or banana-trees. "Have you no *moai*?" (as they are termed) "in England?" was asked by one boy, in a tone in which surprise was slightly mingled with contempt; to ask for the history of the great works is as successful as to try to get from an old woman selling bootlaces at Westminster the story of Cromwell or of the frock-coated worthies in Parliament Square. The information given in reply to questions is generally wildly mythical, and any real knowledge crops up only indirectly.

172 Anyone who is able to go to the British Museum can see a typical specimen of an Easter Island statue, in the large image which greets the approaching visitor from under the portico (fig. 32). The general form is unvarying, and with one exception, which will be alluded to hereafter, all appear to be the work of skilled hands, which suggests that the design was well known and evolved under other conditions. It represents a half-length figure, at the bottom of which the hands nearly meet in front of the body. The most remarkable features are the ears, of which the lobe is depicted to represent a fleshy rope (fig. 38), while in a few cases the disc which was worn in it is also indicated (fig. 59). The fashion of piercing and distending the lobe of the ear is found among various primitive races.¹ The tallest statues are over 30 feet, a few are only 6 feet, and even smaller specimens exist. Those which stood on the burial-places, now to be described, are usually from 12 to 20 feet in height, and were surmounted with a form of hat.²

764 *Position and Number of Ahu.*—In Easter Island the problem of the disposal of the dead was solved by neither earth-burial nor cremation, but by means of the omnipresent stones which were built up to make a last resting-place for the departed. Such burial-places are known as "ahu," and the name will henceforth be used, for it signifies a definite thing, or rather type of thing, for which we have no equivalent. They number in all some two hundred and sixty, and are principally found near the coast, but some thirty exist inland, sufficient to show that their erection on the sea-board was a matter of convenience, not of principle. With the exception of the great eastern and western headlands, where they are scarce, it is probably safe to say that, in riding round the island, it is impossible to go anywhere for more than a few hundred yards without coming across one of these abodes of the dead. They cluster most thickly on the little coves and their enclosing promontories, which were the principal centres of population. Some are two or three hundred yards away from the edge of the cliff, others stand on the verge; in the lower land they are but little above the sea-level, while on the precipitous part of the coast the ocean breaks hundreds of feet below.

[368]

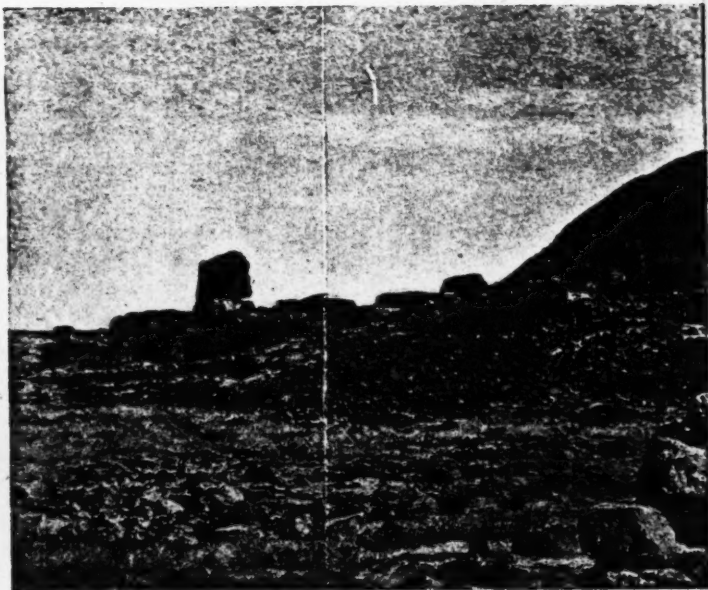
¹ For an illustrated description of the method of expanding the ear, see *With a Prehistoric People, the Ahikuyu of British East Africa*, p. 32.

² A full description of the statues is given in chap. xiv.

15:Routledge E-5 (1914-1915) 1919
OY2 Easter Islanders OY2

Portion of an image
still standing.

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(A modern

166A)

[facing p. 166-B(a)]

15:Routledge E-5 (1914-1915) 1919
OY2 Easter Islanders OY2

Rano Raraku, S.E. face.

133

764

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(A modern wall.)

AHU TONGARIKI, SEAWARD SI.

[facing p. 166-B(b)]

115:Routledge:E-5 (1914-1915):1919

OY2 Easter Islanders OY2

Reversal of fallen images.

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GARIKI, SEAWARD SIDE.

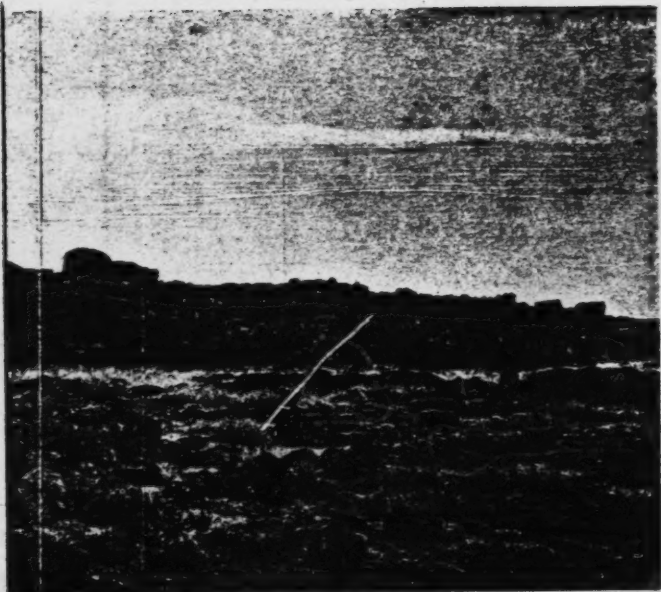
[facing p. 166-B(c)]

15:Routledge E-5 (1914-1915) 1919

OY2 Easter Islanders OY2

FIG. 33.

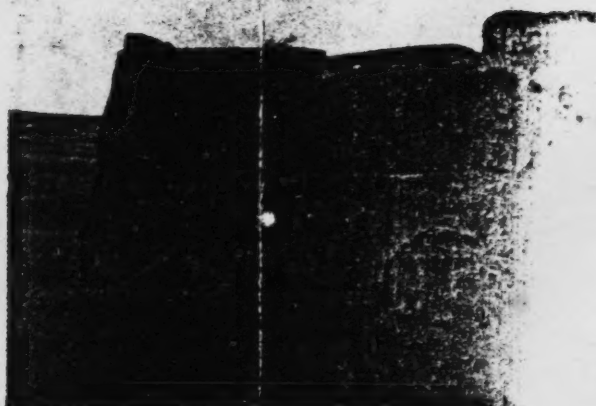
133
• 172
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[facing p. 166-B(d)]

15:Routledge E-5 (1914-1915) 1919
OY2 Easter Islanders OY2

● M2
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[facing p. 166-D (a)]

15:Routledge E-5 (1914-1915) 1919

OY2 Easter Islanders OY2

172
764



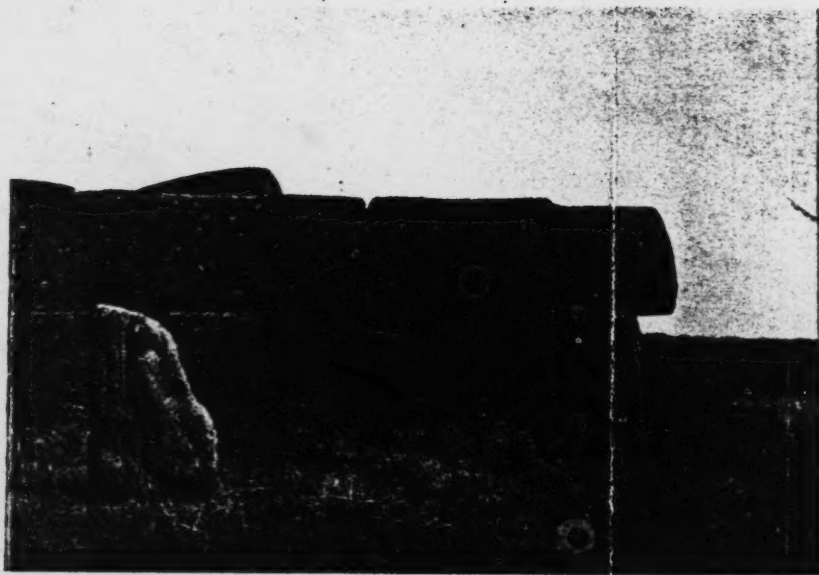
Central portion.

AHU VINAPU.

[facing p. 166-D(b)]

15:Routledge E-5 (1914-1915) 1919
OY2 Easter Islanders OY2

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AHU VINAPU.

[facing p. 166 - D (c)]

15:Routledge E-5 (1914-1915) 1919
OY2 Easter Islanders OY2

FIG. 35



Wing.

[169

[facing p. 156 - D (2)]

CHAPTER XIV

PREHISTORIC REMAINS (*continued*)

STATUES AND CROWNS

Rano Raraku, its Quarries and Standing Statues—the South-east Face of the Mountain—Isolated Statues—Roads—Stone Crowns of the Images.

STRANGE as it may appear, it is by no means easy to obtain a complete view of a statue on the island: most of the images which were formerly on the ahu lie on their faces, many are broken, and detail has largely been destroyed by weather. Happily, we are not dependent for our knowledge of the images on such information as we can gather from the ruins on the ahu, but are able to trace them to their origin, though even here excavation is necessary to see the entire figure. Rano Raraku is, as has already been explained, a volcanic cone containing a crater-lake. It resembles, to use an unromantic simile, one of the china drinking-vessels dedicated to the use of dogs, whose base is larger than their brim. Its sides are for the most part smooth and sloping, and several carriages could drive abreast on the northern rim of the crater, but towards the south-east it rises in height, and from this aspect it looks as if the circular mass had been sliced down with a giant knife forming it into a precipitous cliff. The cliff is lowest where the imaginary knife has come nearest to the central lake, thus causing the two ends to stand out as the peaks already mentioned (fig. 45).

The mountain is composed of compressed volcanic ash, which has been found in certain places to be particularly suitable for quarrying; it has been worked on the southern exterior slope, and also inside the crater both on the south and south-eastern sides. With perhaps a dozen exceptions, the

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striking sight witnessed on the island was a fire on the hill-side; ⁵⁰⁰ in order to see our work more clearly we set alight the long dry grass, always a virtuous act on Easter Island that the live-stock may have the benefit of fresh shoots; in a moment the whole was a blaze, the mountain, wreathed in masses of driving smoke, grew to portentous size, the quarries loomed down from above as dark giant masses, and in the whirl of flame below the great statues stood out calmly, with a quiet smile, like stoical souls in Hades.

The questions which arise are obvious; do these buried statues differ in any way from those in the workings above, from those on the ahu or from one another? were they put up on any foundation? and, above all, what is the history of the mountain and the *raison d'être* of the figures? In the hope of throwing some light on these problems we started to dig them out. It had originally been thought that the excavation of one or two would give all the information which it was possible to obtain, but each case was found to have unique and instructive features, and we finally unearthed in this way, wholly or in part, some twenty or thirty statues. It was usually easy to trace the stages by which the figures had been gradually covered. On the top was a layer of surface soil, from 3 to 8 inches in depth; then came debris, which had descended from the quarry above in the form of rubble, it contained large numbers of chisels, some forty of which have been found in digging out one statue; below this was the substance in which a hole had been dug to erect the image, it sometimes consisted of clay and occasionally in part of rock. Not unfrequently the successive descents of earth could be traced by the thin lines of charcoal which marked the old surfaces, obviously the result of grass or brushwood fires. The few statues which are in a horizontal position are always on the surface (no. 31, fig. 60) and at first give the impression that they have been abandoned in the course of being brought down from the quarries; as they are frequently found close to standing images, of which only the head is visible, it follows that, if this is the correct solution, the work must still have been proceeding when the earlier statues were already largely submerged. The juxtaposition, however, occurs so often that it seems, on the whole, more probable that the rush of earth which covered some, upset the foundations of others, and either threw them

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- 172 down where they stood or carried them with it on top of the flood. These various landslips allow of no approximate deductions as to the date, in the manner which is possible with successively deposited layers of earth.

To get absolutely below the base of an image was not altogether easy. The first we attempted to dig out was one of the farther ones within the crater (no. 19, fig. 47); it was found that, while the back of the hole into which it had been dropped was excavated in the soft volcanic ash, the front and remaining sides were of hard rock. This rock was cut to the curvature of the figure at a distance of some 3 inches from it, and as the chisel marks were horizontal, from right to left, the workmen must have stood in the cup while preparing it: in clearing out the alluvium between the wall of the cup and the figure, six stone implements were found. The hands, which were about 1 foot below the level of the rim, were perfectly formed. The next statue chosen for excavation was also inside the crater (no. 107, fig. 47); it was most easily attacked from the side, and this time it was possible to get low enough to see that it stood on no foundation, and that the base instead of expanding, as with those which stood on the ahu, contracted in such a manner as to give a peg-shaped appearance; this confirmed the impression made by the previous excavation, that the image was intended to remain in its hole and was not, as some have stated, merely awaiting removal to an ahu (fig. 62).

The story was shown not only in the sections of the excavation, but in the degrees of weathering on the figure itself: the lowest part of the image to above the elbow exhibited, by the sharpness of its outlines and frequently of the chisel cuts also, that it had never been exposed, the other portions being worn in relative degrees. Traces of the smoothness of the original surface can still be seen above-ground in the more protected portions of some of the statues, such as in the orbit and under the chin (see frontispiece); but a much clearer impression is of course gained of the finish and detail of the image when the unweathered surface is exposed. The polish is often very beautiful, and pieces of pumice, called "punga," are found, with which the figures are said to have been rubbed down. The fingers taper, and the excessive length of the thumb-joint and nail are remarkable (fig. 72). The nipples are in some cases so pronounced that the natives

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often characterised them as feminine, but in no case which we came across did the statues represent other than the nude male figure¹; the navel is indicated by a raised disc. On the statue with the contracting base, which is one of the best, the surface modelling of the elbow-joint is clearly shown. The orbital cavity in the figures on Raraku is rather differently modelled from those on the ahu; in the statues on the mountain the position of the eyeball is always indicated by a straight line below the brow, the orbit has no lower border (fig. 72). On the terraces the socket is constantly hollowed out as in the figure at the British Museum (fig. 31). 172 ● 532

The eye is the only point in which the two sets vary, with the important exception that some on the mountain have a type of back which never appears on the ahu. This question of back proved to be of special interest: in some images it remained exactly as when the figure left the quarry, the whole was convex, giving it a thick and archaic appearance, particularly as regards the neck; in other instances, the posterior was beautifully modelled after the same fashion as those on the terraces, the stone had been carefully chipped away till the ears stood out from the back of the head, the neck assumed definite form, and the spine, instead of standing out as a sharp ridge, was represented by an incised line. This second type, when excavated, proved, to our surprise, to possess a well-carved design in the form of a girdle shown by three raised bands, this was surmounted by one or sometimes by two rings, and immediately beneath it was another design somewhat in the shape of an M (figs. 64 and 106). The whole was new, not only to us, but to the natives, who greatly admired it. Later, when we knew what to look for, traces of the girdle could be seen also on the figures on the ahu where the arm had protected it from the weather. (It was afterwards realised with amusement that the discovery of this design might have been made before leaving England by merely passing the barrier and walking behind the statues in the Bloomsbury portico.) One case was found, a statue at Anakena, where a ring was visible, not only on the back but also on each of the buttocks, and in view of subsequent information these lower rings became of special importance. The girdle in this case consisted of one line only; the detail of the

¹ The sole possible exception was probably due to some flaw in the stone.

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carving had doubtless been preserved by being buried in the sand (fig. 65). The two forms of back, unmodelled and modelled, stand side by side on the mountain (figs. 66, 67).

The next step was to discover where and when the modelling was done. (Certainly not in the original place in the quarry, where it would be impossible from the position in which the image was evolved; generally speaking there was no trace of such work, and it was not until many months later that new light was thrown on the matter. Then it was remarked that in one of the standing statues on the outside of the hill, which was buried up to the neck (fig. 59), while the right ear was most carefully modelled, showing a disc, the left ear was as yet quite plain, and that the back of the head also was not symmetrical. Excavations made clear that the whole back was in course of transformation from the boat-shaped to the modelled type, each workman apparently chipping away where it seemed to him good (fig. 68). Two or three similar cases were then found on which work was proceeding; but on the other hand, some of the simpler backs were excavated to the foot, and others a considerable distance, and there was no indication that any alteration was intended. There are three possible explanations for these erect and partially moulded statues: Firstly, it may have been the regular method for the back to be completed after the statue was set up, in which case some kind of staging must have been used; one of our guides had made a remark, noted, but not taken very seriously at the moment, that "the statues were set up to be finished"; some knowledge or tradition of such work, therefore, appeared to linger. Secondly, the convex back may be the older form, and those on which work was being done were being modelled to bring them up to date. Alteration did at times take place; a certain small image presented a very curious appearance both from the proportion of the body, which was singularly narrow from back to front, and because it was difficult to see how it remained in place as it was apparently exposed to the base; it turned out that the figure had been carved out of the head of an older statue, of which the body was buried below (no. 14, fig. 60). Thirdly, these particular figures may have been erected and left in an unfinished condition; if so, their deficiencies were high up and would be obvious.

Scampering did not often occur, and when it did so it was in

532 doubt have been taken, two images have been set up, one slightly in front of the other; six still unfinished figures lie in close proximity (figs. 70 and 71). The standing figure, nearest to the lake, bore a rough design on the face, and when it was dug out the back was found to be covered with similar incised marks. [123] The natives were much excited, and convinced that we should receive a large sum of money in England when the photograph of these was produced, for nothing ever dispelled the illusion that the expedition was a financial speculation. It was these carvings more especially that we ourselves hastily endeavoured to cover up when, on the arrival of Admiral von Spee's Squadron, we daily expected a visit from the officers on board. The markings have certainly not been made by the same practised hand as the raised girdle and rings, and appear to be comparatively recent (fig. 64). Other statues were excavated, where similar marks were noticed, but, except in this case, digging led practically always to disappointment. It was the part above the surface only which had been used as a block on which to scrawl design, from the same impulse presumably as impels the school-boy of to-day to make marks with chalk on a hoarding. On one ahu the top of the head of a statue has been decorated with rough faces, the carving evidently having been done after the statue had fallen.

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764 In digging out the image with the tattooed back, we came across the one and only burial which was found in connection with these figures; it was close to it and at the level of the rings. The long bones, the patella, and base of the skull were identified; they lay in wet soil, crushed and intermixed with large stones, so the attitude could not be determined beyond the fact that the head was to the right of the image and the long bones to the left. These bones had become of the consistency of moist clay, and could only be identified by making transverse sections of them with a knife, after first cleaning portions longitudinally by careful scraping.

In several other instances human bones were discovered near the statues, but, like the carvings, they appeared to be of later date than the images. One skull was found beneath a figure which was lying face downwards on the surface; another fragment must have been placed behind the base after the statue had fallen forward. The natives stated that in the epidemics which

SOUTH-EAST SIDE OF RARAKU 101

ravaged the island the statues afforded a natural mark for depositing remains. In the same way a head near an ahu, which was at first thought to be that of a standing statue, turned out to be broken from the trunk and put up pathetically to mark the grave of a little child. There is a roughly constructed ahu on the outside of Rano Raraku at the corner nearest to the sea, of which more will be said hereafter, and a quarried block of rock on the very top of the westerly peak was also said to be used for the exposure of the dead (no. 75, fig. 47). Close to this block there are some very curious circular pits cut in the rock; one examined was 5 feet 6 inches in depth and 3 feet 6 inches in diameter (no. 74, fig. 47). It is possible they were used as vaults, but, if so, the shape is quite different from those of the ahu. The conclusion arrived at was that the statues themselves were not directly connected with burials. There seems also no reason to believe that they are put up in any order or method; they appear to have been erected on any spot handy to the quarries where there was sufficient earth, or even, as has been seen, in the quarry itself when circumstances permitted.

The South-Eastern Side of Rano Raraku is a problem in itself. The great wall formed by the cliff is like the ramparts of some giant castle rent by vertical fissures. The greatest height, the top of the peak, is about five hundred feet, of which the cliff forms perhaps half, the lower part being a steep but comparatively smooth bank of detritus. Over the grassy surface of this bank are scattered numerous fragments of rock, weighing from a few pounds to many tons, which have fallen down from above. The kitchen tent in our camp at the foot had a narrow escape from being demolished by one of these stones, which nearly carried it away in the impetus of its descent. It has never been suggested that this face of the mountain was being worked, nevertheless, it was subsequently difficult to understand how we lived so long below it, gazing at it daily, before we appreciated the fact that here also, although in much lesser degree, were both finished and embryo images. At last one stone was definitely seen to be in the form of a head, and excavation showed it to be an erected and buried statue. A few other figures were found standing and prostrate, and some unfinished images; these last, however,

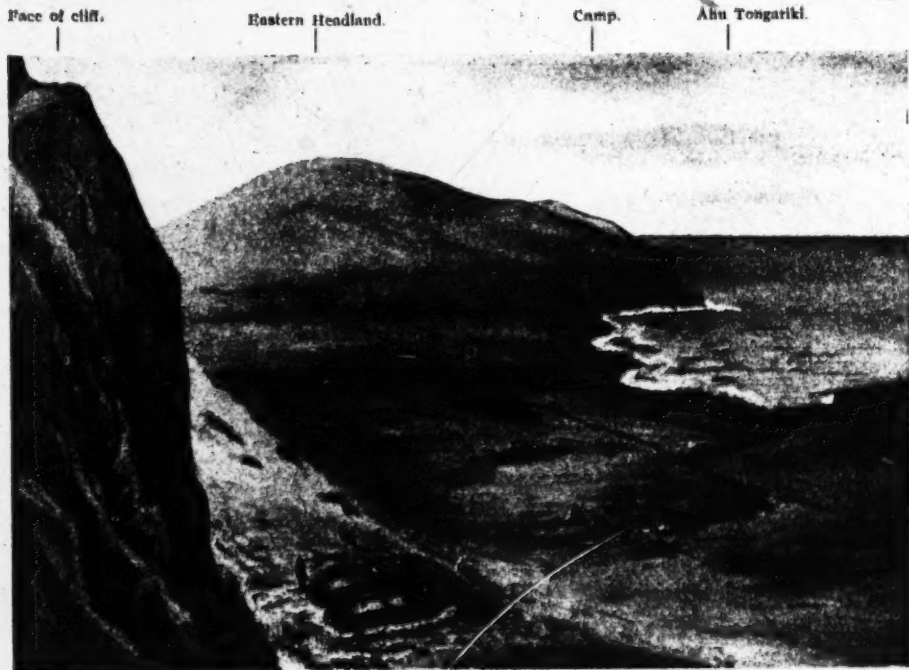
172 were in no case being hewn out of solid rock, but wrought into shape out of detached stones. On the whole, it is not probable that this portion was ever a quarry, in the same way as the western side and the interior of the crater. It is, of course, impossible to say what may be hidden beneath the detritus, but the lower part of the cliff is too soft a rock to be satisfactorily hewn, and the workmen appear simply to have seized on fragments which have fallen from above. "Here," they seem to have said, "is a good stone; let us turn it into a statue."

One day, when making a more thorough examination of the slope, our attention was excited by a small level plateau, about half-way up, from which protruded two similar pieces of stone next to one another. They were obviously giant noses of which the nostrils faced the cliff. Digging was bound to follow, but it proved a long business, as the figures it revealed were particularly massive and corpulent. Their position was horizontal, side by side, and the effect, more particularly when looking down at them from the cliff above, was of two great bodies lying in their graves (fig. 73). The thing was a mystery; they were certainly not in a quarry, but if they had once been erect, why had they faced the mountain, instead of conforming to the rule of having their back to it? Orientation could not account for it, as other statues on the same slope were differently placed. Then again, if they had once stood and then fallen, and in proof of this one head was broken off from the trunk, how did it come about that they were lying horizontally on a sloping hill-side? The upper part of the bodies had suffered somewhat from weather, and a small round basin, such as natives use for domestic purposes, had been hollowed out in one abdomen, but the hands were quite sharp and unweathered. We used to scramble up at off moments, and stand gazing down at them trying to read their history.

It became at last obvious they had once been set up with the lower part inserted in the ground to the usual level, and later been intentionally thrown down. For this purpose a level trench must have been cut through the sloping side of the hill at a depth corresponding to the base of the standing images, and into this the figures had fallen. While they lay in the trench with the upper part of the bodies exposed, one had been found a nice smooth stone for household use. A charcoal soil level showed clearly where the surface had been at this epoch, which

15: Routledge E-5 (1914-1915) 1919
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FIG. 73.



PROSTRATE STATUES, SOUTH-EAST SIDE, NANO RARAKU, AFTER EXCAVATION.

[facing p. 193]

ISOLATED STATUES

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must have been comparatively recent, as an iron nail was found in it. Finally, a descent of earth had covered all but the noses, leaving them in the condition in which we found them. 172.

This, though a satisfactory explanation as far as it went, did not account for the fact that the figures were facing the mountain, and here for once tradition came to our help. [These images] had, it was said, marked a boundary; the line of demarcation led between them, from the fissure in the cliff above right down to the middle statue in the great Tongariki terrace. To cross it was death; but as to what the boundary connoted no information was forthcoming; there seemed no great tribal division—the same clans ranged over the whole of the district. When, however, the line is followed through the crevice into the crater (fig. 47), it is found to form on both sides the boundary where the image-making ceased (no. 1 is a detached figure being brought down, not in a quarry), and was probably the line of taboo which preserved the rights of the image-makers. I was later given the cheering information that a certain "devil" frequented the site of my house, which was just on the image side of the boundary, who particularly resented the presence of strangers, and was given to strangling them in the night. The spirits, who inhabit the crater, are still so unpleasant, that my Kanaka maid objected to taking clothes there to wash, even in daylight, till assured that our party would be working within call. 776.

Isolated Statues.—The finished statues, as distinct from those in the quarries, have so far been spoken of under two heads, those which once adorned the ahu and those still standing on the slope of Raraku; there is, however, another class to consider, which, for want of a better name, will be termed the Isolated Statues. It has already been stated that, as Raraku is approached, a number of figures lie by the side of the modern track, others are round the base of the mountain, and yet other isolated specimens are scattered about the island. All these images are prostrate and lie on the surface of the ground, some on their backs and some on their faces. These were the ones which, according to legend, were being moved from the quarries to the ahu by the old lady when she stopped the work in her wrath; or, according to another account, quoted by a visitor before our day, "They walked, and some fell by the way."

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There must, we felt, have been roads along which they were taken, but for long we kept a look-out for such without success.) At last a (lasy Sunday afternoon ride, with no particular object took one of us to the top of a small hill, some two miles to the west of Raraku. The level rays of the sinking sun showed up the inequalities of the ground, and, looking towards the sea, along the level plain of the south coast, the old track was clearly seen; it was slightly raised over lower ground and depressed somewhat through higher, and along it every few hundred yards lay a statue. Detailed study confirmed this first impression. At times over hard stony ground the trail was lost, but its main drift was indisputable; it was about nine feet or ten feet in width, the embankments were in places two feet above the surrounding ground, and the cuttings three feet deep. The road can be traced from the south-western corner of the mountain, with one or two gaps, nearly to the foot of Rano Kao, but the succession of statues continues only about half the distance. It generally runs some few hundred yards further inland than the present road, but a branch, with a statue, leads down to the ahu of Teatenga on the coast, and, another portion, either a branch or a detour of the main road, also with a statue, goes to the cove of Akahanga with its two large image ahu (fig. 32). There are on this road twenty-seven statues in all, covering a distance of some four miles, but fourteen of them, including two groups of three, are in the first mile. Their heights are from fifteen feet to over thirty feet, but generally over twenty feet.

As a clue had now been obtained, it was comparatively simple to trace two other roads from Raraku. One leads from the crater, and connects it with the western district of the island. It commences at the gap in the mountain wall, in the centre of which an image lies on its face with weird effect, as if descending head foremost into the plain; and runs for a while roughly parallel to the first road but about a mile further inland. It is not quite so regular as the south road, and is marked for a somewhat less distance by a sequence of images, some fourteen in number, which in the same way grow further apart as the distance from the mountain increases. When the succession of statues ceases, the road divides; one track turns to the north-west, and reaches the sea-board through a small

ANCIENT ROADS

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pass in the western line of cones; the other continues as far as a more southerly pass in the same succession of heights. In each pass there is a statue. 172 491

The third road, which runs from Raraku in a northerly direction, is much shorter than those to the south and west. It has only four statues covering a distance of perhaps a mile, and it then disappears; if, however, the figures round the base of the mountain belonged to it, and they lie in the same direction, it started from the southern corner of the mountain, led in front of the standing statues and across the trail from the crater, before taking its northward route up the eastern plain. The furthest of the images is the largest which has been moved; it lies on its back, badly broken, but the total of the fragments gives a height of thirty-six feet four inches. In addition to these three avenues there are indications that some of the statues on the south-eastern side of Raraku may have been on a fourth road along that side beneath the cliff.

So far the matter was sufficiently clear, but another problem was still unsolved: if the images were really being moved to their respective ahu all round the coast, how was it that, with very few exceptions, they were all found in the neighborhood of Raraku? If also they were being moved, what was the method pursued, for some lay on their backs and some on their faces? With the hope of elucidating this great question of the means of transport, we dug under and near one or two of the single figures without achieving our end—nothing was found; but the close study which the work necessitated called attention to the fact that on one of them the lines of weathering could not have been made with the figure in its present horizontal attitude. The rain had evidently collected on the head and run down the back; it must therefore have stood for a considerable time in a vertical position. It was again a noticeable fact that, though some single figures are lying unbroken (fig. 75), others, like the large one on the north road, proved to be so shattered that no amount of normal disintegration or shifting of soil could account for their condition—they had obviously fallen. So wedded, however, were we at this time to the theory that they were in course of transport, that it was seriously considered whether they could have been moved in an upright position. The point was settled by finding one day by the side of the track, some two miles from the 172 483 491

172 mountain, a partially buried head. This was excavated, and a
 483 statue found that had been originally set up in a hole and, later,
 491 undermined, causing it to fall forward. This was the only
 instance of an isolated figure where the burial had been to any
 depth, but in various other cases it was then seen that soil had
 been removed from the base, and one or two more of the figures
 had not quite fallen (fig. 76).

When the whole number of the statues on the roads were
 in imagination re-erected, it was found that they had all

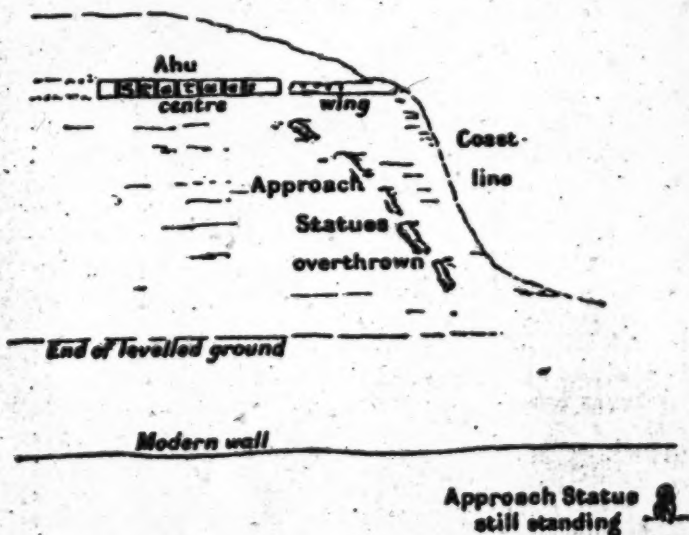


FIG. 77.—DIAGRAM SHOWING CEREMONIAL AVENUE OF AHU HANGA PADEURA.

originally stood with their backs to the hill. Rano Raraku was, therefore, approached by at least three magnificent avenues, on each of which the pilgrim was greeted at intervals by a stone giant guarding the way to the sacred mountain (map of roads). One of the ahu on the south coast, Hanga Paukura, has been approached by a similar avenue of five statues facing the visitor. These five images when first seen were a great puzzle, as some of them are so embedded in the earth that their backs are even with the levelled sward in front of the ahu; later

METHODS OF TRANSPORT 197

there seemed little doubt that, like the two giants on the south-east side of Raraku, trenches had been dug into which they had fallen. Subsequently, a sixth statue was discovered, the other side of a modern wall, weathered and worn away, but of Raraku stone and still upright. This is the only instance of an erect figure to be found elsewhere than on the mountain (fig. 77).

In addition to the images which have stood in these processional roads, there are, excluding one or two figures near the mountain whose *raison d'être* is somewhat doubtful, fourteen isolated statues in various parts of the island, for whose position no certain reason could be found. Some of these may have belonged to inland ahu which have disappeared, or they may be solitary memorials to mark some particular spots, but the greater number appear to have stood near tracks of some sort. Some of these last may have been boundary stones, and in this class may perhaps fall the smaller statue now at the British Museum, which is a very inferior specimen. According to local information it stood almost half-way on the track leading from Vinapu to Mataveru along the bottom of Rano Kao; the hole from which it was dug was pointed out, and our informant declared that he remembered it standing, and that the people used to dance round it. The larger figure at the British Museum was in a unique position, which will be spoken of later.

No statues were, therefore, found of which it could be said that they were in process of being removed, and the mode of transport remains a mystery. An image could be moved down from the quarry by means of banks of earth, and though requiring labour and skill, the process is not inconceivable. Similarly, the figures may have been, and probably were, erected on the terraces in the same way, being hauled up on an embankment of earth made higher than the pedestals and then dropped on them. Near Paro, the ahu where the last statue was overthrown, there is a hillock, and tradition says that a causeway was made from it to the head of the tall figure which stood upon the ahu; and along this the hat was rolled (fig. 78)—a piece of lore which seems hardly likely to have been invented by a race having no connection with the statues. But the problem remains, how was the transport carried out along the level? The weight of some amounted to as much as 40 or 50 tons. It would simplify matters very much if there were any reason to suppose that the

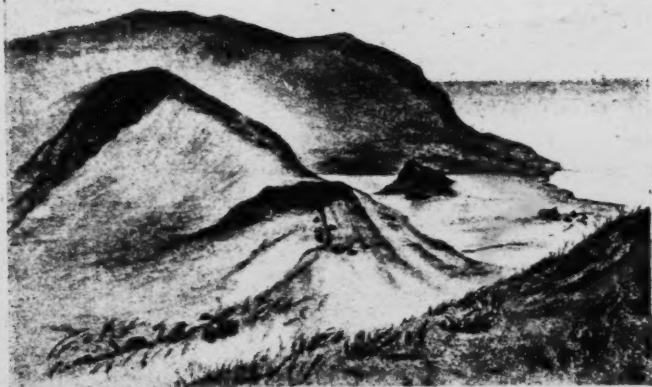
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15:Routledge E-5 (1914-1915) 1919
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FIG 79.



THE CRATER FROM WHICH THE HATS OF THE IMAGES WERE HEWN, ON
THE SIDE OF THE HILL PUNAPAU.

Rano Kao in the distance.

[facing p. 198]

172 images were moved, as was the case with the hats, before being
 y83 wrought, merely as cylinders of stone, in which case it would be possible to pass a rope under and over it, thus parbuckling the stone or rolling it along, but the evidence is all to the contrary. There is no trace whatever of an unfinished image on or near an ahu, while, as we have seen, they are found at all stages in the quarry. Presumably rollers were employed, but there appears never to have been much wood, or material for cordage, in the island, and it is not easy to see how sufficient men could bring strength to bear on the block. Even if the ceremonial roads were used when possible, these fragile figures have been taken to many distant ahu, up hill and down dale, over rough and stony ground, where there is no trace of any road at all.

The natives are sometimes prepared to state that the statues were thrown down by human means, they never have any doubt that they were moved by supernatural power. We were once inspecting an ahu built on a natural eminence, one side was sheer cliff, the other was a slope of 29 feet, as steep as a house roof, near the top a statue was lying. The most intelligent of our guides turned to me significantly. "Do you mean to tell me," he said, "that that was not done by *mana*?" The darkness is not rendered less tantalising by the reflection that could centuries roll away and the old scenes be again enacted before us, the workers would doubtless exclaim in bewildered surprise at our ignorance, "But how could you do it any other way?"

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 491 Besides the ceremonial roads and their continuations, there are traces of an altogether different track which is said to run round the whole seaboard of the island. It is considered to be supernatural work, and is known as Ara Mahiva, "ara" meaning road and "Mahiva" being the name of the spirit or deity who made it. On the southern side it has been obliterated in making the present track—it was there termed the "path for carrying fish"; but on the northern and western coasts, where for much of the way it runs on the top of high cliffs, such a use is out of the question. It can be frequently seen there like a long persistent furrow, and where its course has been interrupted by erosion, no fresh track had been made further inland; it terminates suddenly on the broken edge, and resumes its course on the other side. It is best seen in certain lights running up both the western

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and southern edges of Rano Kao. Its extent and regularity appeared to preclude the idea of landlip. There is no reason to suppose that it is due to the imported livestock, and it has no connection with ahu, or the old native centres of population, yet to have been so worn by naked feet it must constantly have been used. This silent witness to a forgotten past is one of the most mysterious and impressive things on the island.

STONE CROWNS OF THE IMAGES.

Mention must finally be made of the crowns or hats which adorned the figures on the ahu. Their full designation is said to be "Hau (hats) hiterau moai," but they are always alluded to merely as "hiterau" or "hitirau."

These coverings for the head were cylindrical in form, the bottom being slightly hollowed out into an oval depression in order to fit on to the head of the image; the depression was not in the centre, but left a larger margin in front, so that the brim projected over the eyes of the figure, a fashion common in native head-dresses. They are said by the present inhabitants to have been kept in place by being wedged with white stones. The top was worked into a boss or knot. The material is a red volcanic tuff found in a small crater on the side of a larger volcano, generally known as Punapau, not far from Cook's Bay (fig. 79). In the crater itself are the old quarries. A few half-buried hats may be seen there, and the path up to it, and for some hundreds of yards from the foot of the mountain, is strewn with them. They are at this stage simply large cylinders, from 4 feet to 8 feet high, from 6 feet to 9 feet across (fig. 80), and they were obviously conveyed to the ahu in this form and there carved into shape (fig. 81). An unwrought cylinder is still lying at a hundred yards from the ahu of Anakena. The finished hats are not more than 3 feet 10 inches to 6 feet in height, with addition of 6 inches to 2 feet for the knob; the measurement across the crown is from about 5 feet 6 inches to 8 feet. The stone is more easily broken and cut than that of the statues, and while many crowns survive, many more have been smashed in falling or used as building materials.

It is a noteworthy fact that the images on Raraku never had hats, nor have any of the isolated statues; they were confined to those on the ahu.

CANNIBALISM

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or sacrifice on Easter Island. It was in this sort of warfare that the last images were overthrown. 727

While legends record how many people were eaten after each affray, all living persons deny, with rather striking unanimity, not only that they themselves have ever been cannibals, but that their fathers were so. If this is correct, the custom was dying out for some reason before the advent of Christianity; ²⁶⁶ their grandfathers, the old people admit, ate human flesh, but, if there were any rites connected with it, they "did not tell." The great-grandmother of an old man of the Miru clan was, according to his account, killed on the high central part of the island by the Ureohel and eaten. In revenge for the outrage, one of her sons, Hotu by name, killed sixty of the Ureohel. Another son, who had pacifist leanings, thought the feud ought then to be ended, but Hotu desired yet more victims, and there was a violent quarrel between the two brothers, in which the peace-maker was struck on the head with a club; for, as Hotu remarked, if they had slain his father, it would have been different, but really to eat his mother was "no good." [727]

Our acquaintance with the person said to have been "the last cannibal," or rather with his remains, came about accidentally during the time when I was alone on the island. A little party of us had ridden to the top of the volcano Rano Kao; and on the southern side of the crater, that opposite Orongo, some of the natives were pointing out the legendary sites connected with the death of the first immigrant chief, Hotu-matua. Suddenly one of them vanished into a crevice in the rocks, and reappeared brandishing a thigh-bone to call attention to its large size. I dismounted, scrambled into a little grotto, or natural cave, where a skeleton was extended; the skull was missing, but the jaw-bone was present, and the rest of the bones were in regular order; the individual had either died there or been buried. Bones were in the department of the absent member of the Expedition, but it was of course essential to collect them, from the view of determining race, and the natives never resented our doing so. I therefore passed these out; packed them in grass 266 172

¹ Since writing the above the following has been seen: "The higher Polynesian races, such as the Tahitians, Hawaiians, Samoans, had one and all outgrown, and some of them had in part forgot, the practice (cannibalism) before Cook or Bougainville had shown a top-sail in their waters."—In the South Seas, R. L. Stevenson, p. 94.

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in the luncheon-basket, and, sitting down on a rock, asked to be told the story of the cave. "That," my attendants replied, "is Ko Tori." He was, they said, the last man on the island who had eaten human flesh. In this hiding-place he had enjoyed his meals, and no one had ever been able to track him. There had formerly been a cooking-place, but it was now hidden by a fall of stones. He had died as a very old man at the other end of the island, apparently in the odour of sanctity; to judge by the toothless jaw if he had not deserted his sins they must long ago have deserted him. His last desire was to be buried in the place with which he had such pleasant connections, and in dutiful regard to his wishes, or because it was feared that his ghost might otherwise make itself unpleasant; some of the young men bore the corpse on stretchers along the south coast and up to the top of the mountain, depositing it here. The next thing was to get at some sort of date; chronology is naturally of a vague order, and the most effective method is, if possible, to connect events with the generation in which they happened. "Did your grandfather know him," was asked, "or your father?" The answer was unexpected. "Porotu," they said, pointing to one of the old men, "helped to carry him," and silence fell on the group. My heart sank; I had then undone this last pious work and committed sacrilege. To my great relief, however, strange sounds soon made it clear that the humorous side had appealed to the escort; they were suffocating with mirth. "And now," they said, gasping between sobs of laughter, "Ko Tori goes in a basket to England." As I write, Ko Tori resides at the Royal College of Surgeons, and has done his bit towards elucidating the mystery of Easter Island.

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Sexual morality, as known to us, was not a strong point in life on the island, but marriage was distinctly recognised, and the absolute loose liver was a person apart. Polygamy was usual, but many seem to have had only one wife. The children belonged to the father's clan, and are often distinguished by his name being given after their own. At the same time the clan of the mother was not ignored, and a man would sometimes fight for his maternal side. If a man had sons by more than one wife, after his death each claimed the body of his father to lie on the ahu of his mother's clan, and the corpse might thus be carried to several in turn, finally returning to its own destination.